# Clinical Lecture
ON
# PSEUDO-HYPERTROPHIC MUSCULAR PARALYSIS.

*Delivered at the National Hospital for the Paralysed and Epileptic, to Students of University College,*

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*(Continued from p. 2.)*

THE photograph I now show you (Fig. 3) represents a boy (E. G——) who, through the courtesy of Mr. Adams, was under my care here some years ago, in an equally advanced stage of the same affection. He is represented in his customary attitude, sitting on a chair, with legs deformed and evidently powerless, and with his trunk distorted. His arms, as you see, appear extremely thin, especially the upper arm; they were, in fact, greatly wasted, and almost powerless, only the hands retaining some power of movement. His thighs were thin, and the muscles greatly atrophied. His calves, on the other hand, were large, and appear as if in a state of extreme contraction; the swelling of the muscle being situated much higher than normal, and being abrupt; it is, as it were, an exaggeration of the condition of normal contraction—such an exaggeration as is seen in no other disease—an extreme shortening of enlarged muscles. The effect of this shortening is seen in the position of the feet, which are in such over-extension that the dorsum of the foot, instead of forming an obtuse angle with the leg, is curved backwards, the front of the leg and foot forming a convex curve; and the semi-luxation caused, as you see in the right foot, the astragalus to project beneath the skin in front of the lower end of the tibia. There was also a marked inversion of the feet. It is an extreme degree of talipes equino-varus, but the resemblance to ordinary cases of talipes equinus is lessened by the circumstance that the boy had for long been unable to rest his feet upon the toes.

FIG. 3.

You will remember that the case we first examined presented a similar, though slighter, thinness of the upper limbs; the thighs were thin, the muscles weak, and the calves presented slight contraction, rendering it difficult to get the heel to the ground—the commencement of the various changes which have, in the case photographed, led to the extreme distortion of the feet.

In this boy, as you may see in the second photograph, there was an evident and considerable enlargement of the masseters. His history was the same as that of the slighter cases—the same early difficulty in walking, in getting up from the floor, conspicuous enlargement of the calves, progressive weakness, and wasting of the upper limbs.

I hoped to have shown you to-day a third patient in the advanced stage of the disease, but his intellect is impaired, and when he came up to the hospital a week ago his mental excitement was so great that his mother took him back into the country. When nine years of age, in 1874, he was in the hospital for a short time under the care of Dr. Radcliffe, and then presented the waddling gait and difficulty in rising, the large calves and small thighs characteristic of the disease. Until six years of age the only point which attracted notice was a heaviness of gait—he would never run—and a slight spinal curve. At seven he had bronchitis and measles, and the doctor who attended him remarked, "What handsome legs!" After this illness the weakness increased. During the last five years the limbs have wasted much; he has now no power over the upper limbs except the hands; the pectorals and latissimi are almost completely atrophied, and the trapezii and deltoids partially atrophied and quite powerless. The thighs are thin, the calves large and greatly contracted, just as in the photograph of the patient E. G——.

I show you a photograph of another well-marked example of the disease. It is that of a boy aged nine. Two other boys in the family are healthy. His calves are large and hard; the extensors of the knee thin and weak. His back-muscles are thin; the latissimi dorsi are almost gone, and so also is the costo-sternal portion of the pectorals. The deltoid and triceps muscles are rather large, the other muscles of the arms thin. He presents the characteristic gait, and the peculiar difficulty in getting up; to assist himself he has recourse to another expedient, placing himself on "all fours" in a manner which I will describe presently.

The next cases I will mention to you very briefly, because I have no photographs of them to show you, and because they were in their characters very similar to those which you have seen. One was a boy, William St——, thirteen years and a half, kindly sent to me in May, 1873, by Mr. William Adams. His parents are cousins, and his mother's brother suffers from locomotor ataxy. He walked as well as other children until five, after which he gradually lost power. His calves had never attracted attention, but when he was seen, their undue size and firmness were very distinct. The right measured ten inches and a half, and the left ten inches and five-eighths in circumference. The thighs, back-muscles, and upper limbs were small, and power below par, without actual atrophy or paralysis, except that the sterno-costal part of the great pectorals could not be detected. The hollow back was very striking. His gait was shuffling, and his difficulty and manner of rising from his knees were characteristic. Eight months later his condition was nearly the same, but his calves had lessened a little in size, and the left, in which the diminution was the greater (half an inch), had undergone distinct shortening, so that in standing the heel did not touch the ground. The arm muscles were also notably thinner, both upper arms presenting a diminution in circumference of half an inch. This lad has become progressively weaker; his legs are now contracted, the thighs and upper arms are wasted and almost powerless, but his mind is unimpaired. His age is now nineteen years and a half.

It is probable that a younger sister of this boy is the subject of the disease in a slight form. She now, at the age of nine, exhibits some feebleness in her movements, and in rising from the floor "would put her hands on her knees, unless checked" (just as William St——, above mentioned).

The next case is one an account of which has been published in the Medico-Chirurgical Transactions,[1] and for an opportunity of seeing which I have also to thank Mr. Adams. The patient was an only son; the other child, a girl, presenting no evidence of the affection. In his early history we have the common account of late walking and a peculiar gait. The large size of the calves attracted notice as early as three years of age, and reached their maximum size at five. When about seven the weakness in walking had increased, he had great difficulty in rising from the floor, and his heels began to be drawn up, so that soon after eight years of age he ceased to be able to walk. At ten and a half his deltoids were observed to be large; the biceps, pectorales, scapular muscles, and recti femorum were small. Division

[1] Vol. lvii., 1874, p. 247.

of the Achilles tendons (by Mr. Adams) enabled him to walk for a short time with supports. Contraction of the knees came on soon after he again ceased to walk. After an attack of typhoid at fourteen his weakness increased. I saw him first at fourteen and a half. His intelligence was very great. He could not move his shoulder, elbow, hip, or knee joints. His hands could be used fairly well. The weak muscles were wasted, but not extremely. The elbow and knee joints were fixed by muscular contraction, and flexed. The ankle-joint could be moved a little, but was in extreme talipes equinus, the progressive contraction of the calf muscles having more than compensated for the effect of the tenotomy. The thighs and calves were wasted, the latter being scarcely at all prominent, and the earlier enlargement having entirely disappeared. There was a lateral curvature of the spine. He died soon afterwards of bronchopneumonia. The results of the post-mortem examination I will mention presently.

A well-marked instance of the disease was presented by a lad who was sent to me a few months ago by Mr. F. J. Davies of Newport. No other child in the family was affected. The boy never walked well, although his legs and calves were much admired on account of their size. His weakness was not regarded as serious until he was seven. When I saw him he was twelve years of age, and his calves were large and firm, the extensors of the knee small and weak. He had the characteristic difficulty and action in rising from the ground. His upper limbs were thin, but the only special muscular defect recognisable was the absence of the clavicular part of the sterno-mastoids, and of that part of the greater pectorals which arises beneath the first rib.

The last three cases mentioned were isolated instances of the disease, but the remarkable example of the affection of many members of the family S—— is almost paralleled by another series of cases which came under my notice very early in my medical work. They were afforded by the children of a near neighbour of the surgeon, Mr. Simpson of Coggeshall, under whose instruction I had the advantage of commencing the study of medicine. Of a family of ten children, three girls and seven boys, the girls and three boys have been healthy; the remaining four boys, including the eldest-born and the youngest, have shown symptoms of the disease. Two have died, aged each sixteen years. A third is now in an advanced stage of the disease, with curved spine, wasted limbs, and enlarged tongue. In the youngest child, aged five years, the affection is still in an early stage. There is no indication of the disease in other relatives.

You cannot fail to be struck with the fact that of the twenty cases I have yet mentioned, eighteen occurred in boys. To this point, as to the tendency of the affection to present itself in many children in the same family, I will return presently. One other case in a girl has, however, come under my notice. Although not a typical case, its nature is scarcely to be doubted, and even in its untypical characters, it is highly significant and instructive.

The patient when first seen in June, 1875, by the courtesy of Sir James Paget, was fifteen years of age. Her brothers and sisters were healthy. She had always seemed to run somewhat differently from other children, and at eleven or twelve years of age a peculiar difficulty in getting upstairs was noticed. When seen she was a healthy-looking girl, who could walk a good distance on flat ground, but could not rise from a chair, or from the floor, without putting her hands upon her knees. Her calves were of fair size, but not unduly large. There was, however, a remarkable difference between the upper and lower portions of the muscles in front of the thighs. The upper halves were unduly small, and their faradaic irritability was considerably lessened. The lower portions (vasti) were enlarged, and on contraction stood out as if a half cricket-ball had been placed above each knee beneath the skin. The irritability was lowered on the enlarged portions, although it was greater than in the smaller upper parts. The muscles were weak; those below the knee having fair power. The flexors of the hip were still weaker. The left extensors of the spine were less irritable than the right. The only condition worthy of note in the upper limbs was that the sterno-costal portions of the pectorals were not to be found. About a year later, the muscular state remaining nearly the same, a peculiar pigmentation of the skin attracted attention, most intense on the abdomen, back, and thighs. It had very much the aspect of Addison's disease, and Sir William Jenner, who saw the patient with me, had little doubt that such was its nature. On arsenic there was no considerable change, but subsequently, while taking phosphorus, there was a very marked diminution in the tint. Her muscular condition, however, remained nearly the same.

We may now consider, in more detail, some of the special characters of the disease. The first fact which deserves notice is its remarkable relation to sex. It commonly affects boys, very rarely girls. Of the twenty-one cases I have mentioned to you eighteen were boys, and only three were girls. I have found records in medical literature of 139 other cases,[2] and if we add to these the twenty-one cases I have mentioned to-day, we have a total of 160 cases, of which 134 were males and 26 females, a proportion of about one female to five males.

This remarkable tendency of the disease to affect males rather than females shows itself not only in the relative number of sufferers, but also in the degree in which individuals of each sex are affected. We have seen that among the cases I have mentioned there was considerable difference in the degree and rapidity of course of the disease, some patients exhibiting the first symptoms earlier than others, and reaching the ultimate stage sooner; but in no case in a boy did the symptoms present themselves so late, or had the disease, at the age of seventeen, reached so slight a degree, as in the girl whose case I described last.

The next important fact in the conditions of origin of the disease is its tendency to affect several members of the same family. In four of the examples I have given you this was noticeable, and in two the number affected was very striking, in one four, and in the other six cases having occurred. The latter is, I believe, the largest number which has been recorded in a single family, and only one other instance of this number is described.[3] In no case has this tendency been better marked than in the group of cases which first drew Dr. Meryon's attention to the disease. In this every member of a titled family suffered from, and died in consequence of, the affection.

The disease, however, occurs very often in an isolated form, affecting only one member of a family which is otherwise healthy. Of 156 cases, 83 were apparently isolated, and 73 were grouped in twenty-five families. It is probable that these statistics underrate somewhat the frequency with which more than one member of a family is affected, because, in many, other members of the families were young, and may have subsequently presented symptoms of the disease. It will probably, therefore, be not far from the truth to say that in one-half the cases several members of a family suffer, and that in these the average number affected per family is about three. The details of these cases, with which in this respect I need not trouble you, seem to show that the sex of the patients has little influence on its isolated or grouped occurrence. The relationship of the subjects of the disease was as follows: in eleven families two brothers were affected, in four three brothers, in two four brothers. In the remaining ten cases the members affected were: one boy and his uncle; three brothers and uncle; a son, aunt, and uncle; two brothers, uncle, aunt, and great uncle; four brothers, aunt, and uncle; brother and sister; two brothers and sister; two sisters and brother; three sisters, uncle, aunt, and cousin.

It might naturally be expected that a disease which thus evidently depends on conditions which are congenital, and not acquired, should be distinctly hereditary, and the facts I have just mentioned show that it is so in some cases. How

[2] The cases analysed (some, briefly reported, on some points only) have been recorded by Adams, Arnold, Barlow, Barth, Bay, Benedikt, Behrend, Bergeron, Björnström, Brunniche, Brigidi, Butlin, Buzzard, Cavagnis, Coste and Gioja, Chvostek, Davidson, Drake, Duchenne, Langdon Down, Eulenberg and Cohnheim, Balthazar Foster, Friedreich, Gairdner, Gerhardt, Griesinger, McLane Hamilton, Hammond, Heller, Hillier, Hoffmann, Huber, Hutchinson, Ingalls and Webber, Kahrs, Kaulich, Kesteven, Knoll, Lake, Lutz, Mahot, Meryon, Weir Mitchell, Nicolaysen, Ord, Orsi, Partridge, Peirson, Pepper, C. T. Poore, Rakowac, Ralfe, Ranke, Renzi, Roquette, Russell, Seidel, Sigmundt, W. Smith, Spielmann, Stofella, E. T. Tibbits, Wagner, and Wernich. To those reported by Kolacco, Estraluzas, Clymer, and Tuefferd I have been unable to obtain access. Cases not included in the analysis because their identity with the disease, as it occurs in children, is doubtful, have been recorded by Auerbach, Barsickow, Barth, Benedikt, Berger, Billroth, Dyce Brown, Dahllup, Eulenberg, Hitzig, Martini, Müller, Rinecker, Schliesinger, and Waldenström. Many of the latter were, however, included in a collection of eighty cases published in 1873 by Friedreich (Ueber Progressive Muskel-Atrophie, Berlin, 1873).

[3] Lutz, Deut. Archiv für Klin. Med., 1867, p. 358. An extraordinary series of cases of an analogous malady has been recorded by Barsickow (Inaug. Diss., Halle, 1872). In this, in two connected families, there were twenty-four cases. But the subjects were all of adult age; no children were affected, and there was no enlargement of muscles. The cases have not, therefore, been included in the above statistics.

frequently inheritance is traceable is not easy to say, because, in a large number of recorded instances, the point has evidently been imperfectly investigated. It is not enough, as has often been done, merely to ascertain the health of the parents. The parents of affected children never themselves present any trace of the disease. This, as Friedreich has remarked, is not surprising, since females are but rarely affected, and in males it commonly leads to death by or soon after the time of puberty. It is in the collaterals of the parents—brothers, sisters, uncles, aunts, or their children—that other cases of the disease must be sought for; or rather, I should say, of one of the parents, for the facts on record show that the disease is never to be heard of on the side of the father; always when antecedent cases have occurred, they have been on the side of the mother. One of the cases I have mentioned to you (the family S——) illustrates this, and among recorded cases are several striking examples of the same fact. In a family, the history of which has been given by Dr. Russell, of Birmingham,[4] there were nine children, four boys and five girls. Two of the boys were affected. The mother was healthy, but two of her brothers suffered from the disease. The mother's mother was healthy, but *her* brother was almost certainly affected. Lutz[5] has recorded a case in which a brother and sister were affected, the daughter of a second sister, and three daughters of a third sister, one of them by a different husband from the father of the other two. Other cases in which a woman's children by different husbands were affected, have been recorded; one by Heller,[6] in which a son of a woman by one husband, and two sons by another, were all affected, and the mother's brother was also the subject of the disease; another by Nicolaysen,[7] in which two half-brothers were affected. This unilateral inheritance is a very remarkable fact in the etiological conditions, and has to be taken into consideration in discussing the pathology of the disease.

Are there any indications of ancestral disease of a different character? In a few cases there has been a history of some form of paralysis, of insanity, or of intemperance, but these cases, even taken together, amount to so trifling a proportion of the whole that we are not justified in assuming the existence of any causal relationship. Nor are there any facts to show that consanguinity of the parents exerts any influence; in very few of the cases were the parents related. The age of the parents also seems to have no influence on the occurrence of the disease. Some observers have, on the evidence of a few exceptional cases, attributed the malady to inherited syphilis, but wider observation makes it doubtful whether any influence can be ascribed to this condition. In not one of the cases I have mentioned to you to-day was there any indication of parental syphilis.

The age at which the disease occurs is an etiological fact of great importance. It is a disease of early life, commencing, in the majority of cases, before six years. As a rule (to which there are exceptions), the more severe the disease the earlier does it commence. In many cases the date of the first symptoms is difficult to determine on account of their gradual onset. In some, slight symptoms, such as enlargement of muscles, or slight weakness manifesting itself perhaps only as an indisposition to run, existed for some time before any actual disease was suspected, and attracted little notice. Including the cases I have described to-day, the date of the earliest symptoms is given in the records of 105 cases—90 males and 15 females. Of the former, in 33, or more than a third, the first noticed indication of the disease, weakness alone, or with enlargement of muscles, coincided with the first attempts to walk, which in many cases were somewhat later than in healthy children. In one-half the male cases the disease commenced before the sixth year, and in 73, or about 80 per cent., before the tenth year. On the other hand, of the 15 cases in girls in only 1 did the first manifestation of the disease coincide with the first walking, and in only 3 cases did it commence before the sixth year, and in only 8 cases before the tenth year. Thus the disease begins on or after the tenth year in only 20 per cent. of the males, and in 50 per cent. of the females, who suffer from it. In some instances the first symptoms have presented themselves at the same age in more than one affected member of the family. This, however, is not always the case; in two or more brothers the symptoms may commence at different ages, as the cases I have described show.

In the vast majority of cases the disease appears to own no other causes than those which exist in, and are born with, the individual. Condition of life, and all that this implies, seems to exert no influence. It has, indeed, been ascribed, in some cases, to bad food, or to damp, dark dwellings. Such conditions may intensify the morbid process, but there is no evidence that they are actual causes of the disease. Indeed, my own observation would suggest that it is less common among the poor than among those who are in comfortable circumstances. Of the cases I have described, only four occurred among the poor; in the families of the other cases there was no want of the necessaries, and even of the luxuries, of life.

In a very few cases on record the disease has followed some physical injury. It is probable that, as I shall point out presently, some of these ought not to be classed with the cases I have described to you to-day, and the remainder only show how small an influence is to be ascribed to this cause. In one or two cases, again, the symptoms have first attracted attention after an acute disease, but the remark just made regarding the influence of bad hygienic conditions applies here also. The morbid process may first manifest itself, or may be apparently accelerated, during the weakness of convalescence from acute disease, and the stimulated tissue growth of repair may carry the patient farther on the wrong road, but an acute illness can scarcely be regarded as one of the causes of the affection.

*(To be continued.)*

4 Medical Times and Gazette, May 29th, 1869.
5 Loc. cit.
6 Deut. Arch. für Klin. Med., 1866, p. 616.
7 Virchow's Jahresbericht, 1876, ii., 89.

# Croonian Lectures
ON
# SOME APPLICATIONS OF PHYSICS TO MEDICINE.

*Delivered at the Royal College of Physicians of London, March 1879,*

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## LECTURE I.—PART III.

### APPLICATION OF BERNOULLI'S LAW TO AERIFORM FLUIDS: STREAM LINES.

THE theorem of D. Bernoulli, which is the fundamental law of hydraulics, and on which the first part of my lecture was founded, may be generally stated as follows:—

*The difference of height, due to pressure, in any two transverse sections, is equal to the difference of level of the centres of gravity of those sections, minus the difference of height due to the velocities in the upper and lower part of the stream.*

An analogous theorem has been formed for the permanent movement of gases. It would be beyond my present province to give in detail the mathematical method by which this result is obtained. It, however, appears generally that the flow of gas through an orifice can be calculated by the same laws as that of an incompressible fluid.

The vena contracta also is formed *in gases*, and, with a thin linear orifice, decreases the outflow, according to D'Aubuisson's experiments, to 0·65 of unity. By a cylindrical nozzle, this is increased to 0·93; by a cone to 0·94.

Fluid friction also acts in a long pipe, being (1) proportional to a fraction of the second degree of the mean velocity; it is also (2) proportional to the product of the length of the pipe into its sectional perimeter; and (3) to the density of the gas. The constant obtained for water, and other incompressible fluids is not far different from that for permanent gases.

Friction, however, may entirely stop the flow of air, or other compressible gas, in a very long pipe. This, indeed, formed a serious difficulty in some early attempts at convey-

ing power by means of compressed air to long distances, and is increased by the large amount of heat developed in compression.

From a medical point of view the elasticity and easy compressibility of air is of the highest significance. Whenever the slightest obstacle is placed in the way of a current, active vibration is set up, which, directly it rises to a very moderate number of waves per second—certainly not more, and probably less than forty,—translates itself into musical sound. Indeed, it is remarkable how easily vibratory motion is impressed on columns of air passing through tubes. If the tube have smooth walls, the effect is not very marked. Dr. Guthrie has, however, shown a curious experiment which bears closely on our present purpose. He uses a length of india-rubber tubing lined with a spiral iron wire, such as is commonly manufactured for gas connexions, to prevent collapse or "kinking." If this be gently blown into, a low musical note is obtained by the successive periodical obstructions of the projecting spiral; by increasing the force of the blast and the consequent velocity of the current, a regular series of harmonic notes can be obtained. The spiral wire so nearly resembles the rings of cartilage which surround the trachea and bronchi, and which project somewhat into the inner calibre of the tubes, that the analogy is fairly close.

It is my next object to show, first, the setting up of a counter vibration or counter current *in air*, after the analogy of the vena contracta in fluids. It is rather difficult in an aeriform fluid, but there is here an apparatus by which, after a fashion, it can be exhibited. Here is a pair of bellows and a tubular vessel enlarged in the centre, into which air can be blown lengthwise. Of course the air will run through from orifice to orifice, but the moment we send it through, a counter current is set up, which can be shown by means of smoke, or even by light particles of paper-ash, which have been inserted for this purpose.

*A current of air was sent through the centre of a spheroidal vessel with velocity, producing, at its outer surface, counter currents sufficient to blow smoke or ashes backwards towards the bellows.*

Then again we can show it in this organ pipe. If we blow a current of air in at the mouth of the organ pipe, it goes directly upwards, and there is nothing to make a counter-current; but if it is broken against the sounding edge, then there is an inward and outward current; a distinct suctional effect is produced as plainly as is possible to show at a distance.

I will endeavour to give a third illustration of the principle.

Here is an obstruction in a horizontal cylindrical pipe, much the same as that which the larynx makes in the course of the trachea. I believe I can produce a suctional effect here also. The vertical tube is inserted just beyond the obstruction, and there is no reason, except from some action of this kind, why the draught should be in a vertical direction; but on the principle of Giffard's injector, there is a drawing-in of smoke at the top orifice in opposition to enormous friction.

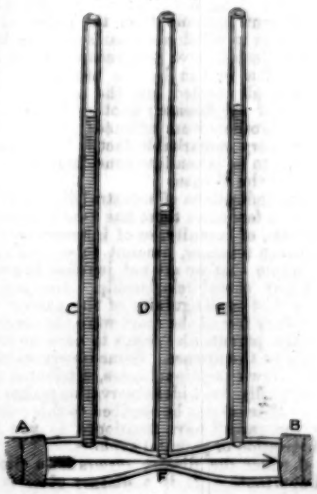
*Air from a bellows was passed, at high velocity, through a horizontal glass tube of large section, in which an obstruction had been planted, reducing the sectional area of passage to about one-fourth. Just beyond the obstruction a long narrow tube joined the main conduit at a right angle. On working the bellows, a distinct stream of smoke was drawn down the vertical tube.*

The phenomenon just shown, which reaches its highest devolopment in Giffard's injection, really depends on a larger law—that, namely, of stream lines—to which I next proceed. If a pipe like this be taken, large at the ends and small in the middle, and a stream of water be passed through it, it might be thought that the pressure would be much the greatest in the narrow part. It is obvious, one would say, that as the water came in it would be more squeezed in the middle. Now the very opposite is true, and the fact is startling, so startling that, when rightly looked at from a semi-physiological point of view, it may throw open to us new facts. Perhaps, when farther explained, it may not be so difficult to understand.

The pressure is less in the narrow part because the velocity which we have to consider is greater in the narrow than in the broad part, in the proportion of the sectional area of one to that of the other. Velocity implies force, the increasing velocity implies a constant force; each particle, therefore, is passing from a region of higher to one of lower pressure. Differences as to pressure, therefore, depend simply on velocities, or, if you will take it in other terms, on sectional areas. This is not difficult to understand if you consider what is termed the vis viva; this vis viva is constant in a perfect fluid. If that fluid be still, the vis viva is equal to the pressure statically considered, but directly you introduce the dynamical method and add the element of motion you have to make a sort of compromise. If there be no pressure, and it be moving, the vis viva will be converted wholly into velocity. These are the two termini—the two poles; if still—the vis viva is entirely pressure if moved freely without obstruction—it is entirely velocity; at all intermediate positions it is variously compounded of the two. What stillness there is in the water is producing pressure; what motion there is is producing velocity. This is true of a contraction, and if I made a dilatation the opposite would be true, the pressure in the dilatation would increase.

*By an experiment with a constricted tube furnished with three small gauge-tubes, one inserted at the constricted part and one on each side of it, it was shown that the water flowing out of an elevated cistern along the constricted tube caused the level in the central gauge-tube to fall six or more inches below that in the side ones.* (Fig. 2.)

FIG. 2.



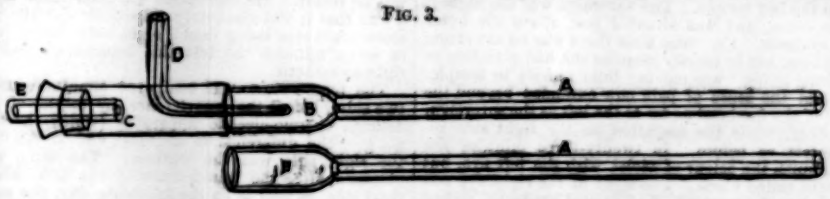

We may thus reduce the pressure to zero or below. If it goes to zero, we should simply have the tube in the middle empty; but if it goes down below, we get the foundation of a very important mechanical improvement, what is called Giffard's injector. I do not know whether you are aware (it is a question of mechanical engineering) that it is possible to fill a boiler even when the steam is on at a high pressure by injecting water at a high velocity. If I could obtain a sufficient flow of water, I could remove this narrow constriction in the tube, and by cutting away a piece and leaving the enlarging orifice standing opposite the contracting orifice, the water would shoot across the distance, and there would be no outflow. If there is anything which seems to produce an approximation to perpetual motion, it is this principle of Giffard's injector; it is obviously not really so, because you are dealing with different terms; you are dealing with momentum when the water flows out, and with statical pressure when the water is being forced in; and you can always increase the momentum *ad libitum* up to infinity by multiplying weight into velocity. *This aspirating power occurs both in liquids and in gases, in both of which I propose to demonstrate it to you.* (Fig. 3.)

*The horizontal tube of two similar injectors was in the first place connected with a pair of bellows: the vertical or suction tube dipping into a vessel of coloured water. Directly the horizontal current was established with sufficient force, the water was raised in the vertical direction to a height of above twelve inches. The injector of the other apparatus was connected with a cistern of water coloured blue, established in the roof of the lecture theatre, the vertical tube*

*dipping into a vessel of red-stained water. The whole was then brought into the field of an oxy-hydrogen lantern, and the magnified image thrown upon a screen. The blue descending column of about twelve feet in depth instantly drew up a lateral stream of red fluid, which was seen to mix with the former in efflux.*

This essential principle of combined streams was first investigated by Venturi in 1798, and stated in his essay, "Sur la Communication laterale du Mouvement dans les Fluides." The theory of the conservation of momentum was first explicitly applied to combined streams by the late Mr. William Froude in 1860. The mathematical exposition

FIG. 3.




was given by Mr. Macquorn Rankine, in a paper read before the Royal Society in 1870.

It will be seen that the law has obviously many applications in medicine. To one only of these will time allow me on this occasion to advert. Dr. Curnow, in his Gulstonian Lectures of the present year, to which I have had the pleasure and profit of listening, very correctly attributes the efflux of the chyle from the upper orifice of the long vertical thoracic duct to the suctional power of the collateral stream in the subclavian vein. The arrangement anatomically is exactly that of the aspirator, as just shown, and affords an admirable illustration of the views I am advocating.

## NOTES OF A CASE OF HYSTERO-EPILEPSY.

BY DR. McCALL ANDERSON,
PROFESSOR OF CLINICAL MEDICINE IN THE UNIVERSITY OF GLASGOW.

ON Feb. 14th, 1879, there was admitted under my care, in the Western Infirmary, a domestic servant, eighteen years of age, who was suffering from fits. Her father and mother and two of her sisters, she thought, died of phthisis; but there is no history of epilepsy or other nervous disease in the family, except that she believes a cousin on her mother's side to be similarly affected. Until three years before admission, when she had an attack of typhus fever, she always enjoyed good health, and it was during convalescence from it that her first fit occurred. At the commencement the fits recurred about once a month, but they have gradually become more and more frequent, and now she has them almost every day, but at no particular time. She has only menstruated once, about a month ago, and when menstruation commenced she had a fit. She complained of nothing else until pressed, when she admitted that she had an almost constant pain in the left iliac region; and she stated that if she got a fright at any time the left leg and arm, especially the latter, became firmly contracted for a moment. Her tongue was not very clean, but her appetite was good, her bowels regular, and her temperature normal.

A careful examination of this patient soon showed that the history given far from exhausted the category of her symptoms. She had amblyopia on the left side, in so far as she had great difficulty in reading small print with the left eye; and she was colour-blind with it to this extent, that she recognised blue, yellow, and red, while green she called black or navy blue, and violet black. This corresponds with Charcot's observations, who states that the colours disappear according to a mathematical order—violet disappearing first, then green, then red, then yellow, and blue last of all. It seems, too, that for a quarter of an hour after a fit everything appears white. Another peculiarity noted was slight powerlessness of the left side, not amounting to paralysis, as there was no lameness; but on squeezing the dynamometer with the right hand it registered 65, while with the left only 35 kilogrammes. But a much more marked feature, and one which the patient apparently was not aware of, was complete hemianæsthesia of the left side. This was tested over and over again, the patient being blindfolded, and every precaution being taken to prevent deception; and it was uniformly found that there was complete loss of the sense of touch, of temperature, and of pain. A needle could be thrust into the arm or leg ever so far without the patient wincing in the least, while the slightest pinch on the right side made her start. It was observed, too, that the needle punctures bled much more readily on this side; and once or twice it was noted, when the sensation was temporarily restored to the left side, by the methods to be mentioned later on, that punctures on that side began to bleed which were altogether bloodless while the anæsthesia was present. This affords one of many proofs that the symptoms were not feigned. The loss of sensation was not limited to the skin, but likewise involved the mucous membranes on the left side: thus the left eyeball could be touched without her wincing in the least. She had also lost the sense of taste upon one side of the tongue, as she could not recognise coffee or salt when placed upon the left side, although she had no difficulty in doing so on the right. This loss of general and of special sensation was exactly limited to the left side, for on crossing the middle line she at once told us, although carefully blindfolded.

On deep pressure over the right ovary no complaint was made; but on the left side, although the skin was quite anæsthetic and could be pinched up without her knowing it, there was marked tenderness. On this side the ovary could be felt, being somewhat engorged, and every time it was compressed she heaved a deep sigh; and I have very little doubt that had I felt justified in keeping up the pressure *just* sufficiently[1] to cause pain a fit would have been induced.

I had the opportunity of seeing only one fit, which occurred one day after she had been mesmerised, but it was evidently identical in its characters with those seen by my assistant, Dr. Dunlop. Each fit consisted of a series of paroxysms, each lasting two or three minutes, with intervals of somewhat similar duration, their number varying on different occasions, sometimes as many as fifteen being observed, and the whole fit lasting from half an hour to three hours. The fit was preceded for a second or two by a peculiar creeping sensation, beginning in the region of the left ovary, and creeping gradually up the abdomen, thorax, neck, and head, and causing ringing in the ears and specks to float before the eyes, after which everything was a blank to her. When in a fit she always lay upon her back. The first thing observed was that her fingers and toes twitched, and as this became more pronounced she stretched her arms out at right angles to her body; her face became flushed; she ground her teeth, and is said occasionally to have bitten her tongue; her breathing became spasmodic, but consciousness was not entirely abolished. As the paroxysm progressed, the convulsive movements became more widespread, and tonic and marked opisthotonos generally ensued. During the paroxysms, which passed off gradually, she occasionally uttered a cry. In the intervals she lay still, apparently unconscious, with her eyes fixed, but on blowing on her face she closed them for a moment, and occasionally gave a gasp. Both sides of the body were equally affected, and the first of the series of paroxysms was generally the most severe. For about a quarter of an hour after the cessation of each fit she was quite unable to speak, and during this time, as before mentioned, she had no perception of colours, everything appearing to her white. The fits, too, were sometimes succeeded by sleep, at other times by very severe headache; but when they were over she had no recollection of them whatever.

[1] Very firm pressure arrests a paroxysm.

Such being the state of the patient at the time of her admission, it was determined to search for a metal which might have some influence on her symptoms (metalloscopy). The following observations were therefore made.

On Feb. 21st, at 10.30 A.M., three pieces of gold (a sovereign and two half sovereigns) were applied in a slanting direction to the left temple. The sovereign was the highest of the three coins, and was situated just above the outer end of the eyebrow. For some time there was no alteration in her condition, but in twenty minutes she had a feeling as if "something living" was moving from temple to temple. Sensation and the sense of pain now extended beyond the middle line of the forehead as far to the left as the sovereign, but no further, while the sensation on the right side remained perfect as before. In twenty-three minutes she could distinguish the colour of violet with the left eye, but green she still called black. The sight of the right eye was not affected, but she complained of frontal headache, sighed frequently, and had spasmodic jerkings of the head. On removal of the coins, under which the anæsthesia was unaffected, the headache and jerkings disappeared. At 3 P.M., when she was again seen, the alteration in the symptoms above mentioned still persisted.

At this time a large magnet was held over the left forearm, at a distance of about half an inch from the surface. In half a minute sensation began to return to the left forearm, and within five minutes there was complete return of sensation and sense of pain to the whole of the left side of the body, but the whole of the right side had become completely hemianæsthetic and analgesic. The left eye continued in the same state as regards the colour-blindness as before the observation, but with the right green appeared to her black. The magnet was next held over the right forearm, at the distance of half an inch from it, and in two minutes and a half sensation had returned to the whole of the right side of the body; but, contrary to expectation, the left side did not again become anæsthetic, so that sensation was now perfect over the whole body. The colour-blindness remained as before the last observation.

Next day (Feb. 22nd) she was in the same state—that is, sensation was perfect all over; with the left eye she could distinguish all colours, while with the right she mistook green for black. The magnet was now placed within half an inch of the left forearm, and in three minutes the whole of the left side became anæsthetic and analgesic, including the mucous membrane of the left eye (which could be touched without the patient feeling it at all), left side of the nostril, mouth, and tongue, the sense of taste being likewise gone on this side. The colour-blindness did not, however, reappear on the left side, although with the right eye she mistook violet for black. The left ovary continued tender. The magnet was next held close to the right forearm, and in three minutes sensation had disappeared from the right side of the body, but there was no transference of the sensation to the other side, so that the whole body was now anæsthetic, including the mucous membranes, and she had entirely lost the sense of taste. When in this state a circular piece of lead, four inches in diameter, was fastened to the right forearm, and in one minute sensation was restored to both sides of the body, and there was no colour-blindness with either eye, but the left ovarialgia persisted. A piece of tin of the same size and shape was next applied over the left arm without her knowing of the change of metal, but in seven minutes, there being no alteration in the symptoms, the lead plate was substituted, but was removed in five minutes, as it had no effect. The magnet was then held over the *left* forearm, and in a minute there was anæsthesia and analgesia of the *right* side of the body, but on transferring the magnet to the right side, the anæsthesia and analgesia were immediately transferred to the left side. She could now distinguish all colours with the right eye, but with the left she called green black.

At a meeting of the Medico-Chirurgical Society on Feb. 28th, before a large number of the profession, the patient was blindfolded, and the following additional observations were made:—(1) The ordinary magnet with keeper on had no effect, though used for at least ten minutes. (2) A large electro-magnet was employed by my colleague Professor McKendrick. So long as the current was not allowed to pass, there was no result, but in three minutes after it was turned on, without her being made aware of it, the sensation returned to the left side of the body, while the right became anæsthetic and analgesic, being the reverse of her state before the electro-magnet was used.

On Tuesday, March 4th, with the co-operation of Drs. McKendrick, Ramsay, and Service, and the patient being blindfolded, a solenoid was placed on the little finger of the left (anæsthetic) side. For seven minutes it was not connected with the battery (Stöhrer's) which was placed underneath the bed, with an assistant in charge of it, and there was no result. The connexion was then made (and in such a way that it was absolutely impossible for the patient to know what was being done), eight cells being in use, and in seven minutes the left side became æsthesic, and the right anæsthetic.

The temperature was compared simultaneously on the two sides, before the transference, by means of Lombard's delicate thermo-electric apparatus (which, however, does not give the difference in degrees), and it was found that the right side was the warmer. The same result was obtained after the transference of the anæsthesia to the right side, as well as on the following day, the condition of the patient in the interval remaining the same as after the employment of the solenoid.

On March 19th internal metallo-therapy (Burqism) was resorted to—that is, the internal administration of the metal which, applied externally, caused a transference of the phenomena. Lead being one of the metals in question in this case, the acetate of lead in doses of two grains was given in pill thrice daily.

Next day (March 20th) she had a fit which lasted for an hour, and on the afternoon of the 25th, while sewing, she noticed that sensation had returned to the left side. The left ovarian tenderness was now found to be diminished, though not gone, but the colour-blindness, as regards violet, remained.

The treatment was continued up to the time of her leaving the hospital on April 5th. While under observation she had all along been very troublesome, and she finally left after having quarrelled with one of the "scrubbers." At this time she was in the same state as on March 25th.

The symptoms observed in this patient corroborate in the main those recorded by Charcot, with some exceptions, however. Thus (1) she was susceptible to *more than one* metal—to lead and partially to gold; (2) after the anæsthesia was transferred to the right side with a magnet, on using it on the right side, sensation returned to that side, *but did not leave the left;* (3) sensation being perfect on both sides, the magnet was applied to the left arm, and sensation disappeared on that side. Then, on applying it to the right arm, the right side became anæsthetic, *but the left side remained anæsthetic too,* so that the whole body was now anæsthetic, and there was tenderness (though not so marked) over the right as well as over the left ovary, indeed more or less over most of the abdomen; (4) on applying lead to the right arm, the whole body being anæsthetic, sensation returned *to both sides.*

I purposely abstain from any remark upon this case further than to say that, extraordinary as the symptoms undoubtedly were, I thoroughly satisfied myself that they were real, and not imaginary, and that deception on the part of the patient was altogether out of the question.

Glasgow.

## CASE OF TRAUMATIC TETANUS, TREATED WITH THE HYPODERMIC INJECTION OF ATROPIA; AMPUTATION OF GREAT TOE; RECOVERY.

BY SURGEON D. H. CULLIMORE, F.R.C.S.I., &c.,
EX-RESIDENCY SURGEON AT THE COURT OF THE KING OF BURMAH.

IN April, 1875, when the highest temperature in the shade was 98° F., with a great diurnal variation, the rainy season having just set in, a Lascar, a camp follower, was admitted into the hospital for details at Rangoon, Burmah, suffering from a lacerated contused wound of the great toe, inflicted some three days previously by the tread of a horse. The patient (a powerful muscular man, aged twenty-eight years) was confined to bed, and a rice poultice, medicated with laudanum, applied for two days, when, no improvement taking place, and the condition and seat of the injury being such as is frequently followed by tetanus, the toe was

amputated, with the object of removing what I was afraid might become the exciting cause of that disease, when, somewhat to my surprise, in about fifty hours after the performance of the operation, the symptoms of tetanus became manifest—first, by yawning and listlessness; secondly, by stiffness of the muscles of the neck and the abdomen, accompanied by the usual expression of face; and, lastly, and later on, by spasmodic contraction of the abdominal muscles and opisthotonos, which latter continued for about six hours on the fourth day from the inception of the disease.

As this was the fourth case that came under my notice in the space of six months, one of which was treated with chloral, and the others with hypodermic injection of atropia in combination with morphia, and as all three terminated fatally between the ninth and the twelfth day, I felt convinced that chloral would prove a failure, and, judging from the physiological effect of morphia and atropia, which is the reverse of each other, at least in so far as their action on the pupil is observed, I determined to try atropia alone, more with the object of noting its action than with any but a vague hope that it might be the means of preventing a fatal issue. On the first appearance of the symptoms one-sixtieth of a grain of atropia was injected hypodermically over the dorsal spinal region, and was repeated three times daily. On the morning of the second day one-fortieth of a grain was injected every four hours, and continued for six successive days, till the spasms had entirely ceased, and the stiffness disappeared from all but the muscles of the neck and face, which, as they were the first to become affected, continued longest under the influence of the disease. On the eighth and ninth days the dose was reduced to one-sixtieth of a grain twice a day, and subsequently reduced to one-sixtieth of a grain at night for a further period of two days, ending on the evening of the eleventh day from the commencement of the disease, when the patient, though not yet cured, was well out of danger, and in a fair way to recovery.

I should have mentioned that the bowels were constipated throughout, and were acted upon by four grains of calomel with forty grains of compound jalap powder, administered every other day, and that after each evacuation the patient invariably expressed himself "much lighter" and relieved.

Under the influence of tonics and nourishing diet, with an occasional purgative, such progress was made that on the twenty-sixth day from his admission into hospital, and on the twenty-first from the manifestation of tetanic symptoms, the man was discharged. During his stay in hospital, and within the space of nine days, two grains of atropia were introduced into his system, which caused neither dilatation of the pupil nor any continued increase of temperature; in fact, there was no ascertainable physiological action, with, perhaps, the exception of drowsiness and slight occasional hyperæsthesia of the surface, which I am now more inclined to connect with the disease than the remedy.

Though this case occurred so long ago, the facts may be relied upon, as the notes were taken at the time, but not published from want of leisure.

*Remarks.*—The points illustrated by this case are:—

1. That tetanus—i. e., a series of reflex phenomena depending upon an over-excited or congested state of the brain, the spinal cord, and their membranes—is capable of being relieved, or even cured, by atropia, when administered in comparatively small doses, extended over a certain period of time according to the severity of the symptoms; though we know from the experience and experiments of Drs. Harley, Fraser, and others, that when given to its full physiological effect it produces excitement and congestion of the cord, followed by the usual reflex results, as jactitation, muscular spasm, and convulsive fits.

2. That the administration of the medicine was not followed by any of the easily recognisable symptoms of the drug (two grains of which has caused the death of a healthy adult when given in one dose), proving both the tolerance induced by the disease, and, perhaps, also illustrating the homœopathic theory or formula, *sine* the infinitesimal system of dosage.

3. That amputation of the injured part, recommended so strongly by Larrey and others, even after the supervention of tetanus, though it may perhaps help to lessen the severity of the disease, does not act as a prophylactic, and should, I think, never be had recourse to after the symptoms have declared themselves. It would then be injurious, for the peripheral irritation would have become central, and independently dynamic. For the same reason, the division of nerves should not be resorted to. In two cases where I examined the nerves after death I failed to perceive that they differed in any way from those of the opposite side. In one of these there was slight congestion of the membranes and a softening of the cord in the lumbar region, and in the other a peculiar cloudiness of the cord, which may, however, have been due to post-mortem changes. Yet it is certain that there is some lesion, though in every case we may not be able to perceive it. This lesion should be looked for in that portion of the spinal cord with which the nerves from the affected part first communicate.

4. If the line of treatment adopted in this case should be found beneficial in others of the same disease, I would suggest that it might be extended, with such modifications as may be necessary, to the treatment of such allied diseases as epilepsy, puerperal convulsions, and hydrophobia.

Devonshire-street, Portland-place, W.

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CASE OF

## SUPPOSED DEAF-MUTISM; EUSTACHIAN CLOSURE; MOIST CATARRH OF TYMPANUM; RECOVERY.

BY T. WEMYSS BOGG, M.B., M.R.C.P. LOND.

IN August last, at the Christ Church Infant Nursery, in this town, my attention was directed to an older child, who was stated to be an inmate because of being deaf and dumb. Never having inspected the ears of a deaf-mute, I asked permission to examine hers, and on doing so a few days later I learned that the deaf-mutism was not absolute, and obtained the following history.

Jemima B——, aged five years; had two maternal uncles who became stone deaf; had scarlet fever at eleven months; no otorrhœa, no convulsions, but has been deaf ever since. Was unable to go to school, or to hear passing vehicles.

August 13th, 1878.—Child hears when spoken to in a loud voice; puts a watch to her ears; smiles when a tuning-fork is placed at her right ear. Tries to imitate some sounds, and can say imperfectly about twenty words—viz., Freddy, Johnny, dada, mamma, Bob, get away, leave off, one, two, three, four, five. Cannot ask for anything by name; palate not cleft. Right membrana tympani entire, rather opaque; cone of light visible. Left membrana the same, partly hidden by wax. On learning these facts, I concluded that treatment with Allen's nasal bag would either relieve or cure her deafness, and applied it to her nostrils several times every day, or every other day, from Aug. 14th to Sept. 13th, afterwards less frequently. After the first application she appeared to hear my voice better.

16th.—Her mother says she certainly hears better. Syringed left ear and removed a considerable quantity of hard wax. Several enlarged vessels seen on malleus; moist sound in ear heard on using Allen's nasal bag. She heard the nurse speak to her this morning.

17th.—While lying in bed this morning, lifted up her finger as a sign to listen while a cart was passing.

21st.—Seems to hear better when spoken to; the voice has not to be much raised. Has tried to imitate the voices of the children singing, but can only attempt to utter "Oh, I say." Tried to say "lady" when a visitor came.

23rd.—Hears the knocks at the door. Air enters tympanic cavity with a drier sound; left membrana tympani fibrous-looking; a bloodvessel crosses it midway down behind manubrium; cone of light imperfect.

24th.—Drier sound with nasal bag. She pointed up to the sky when it was thundering to-day; had never noticed it before.

25th.—Tried to say "flower" when the word was loudly uttered to her.

28th.—Hears them speak in a low tone, and hears light knocks at the door.

31st.—Heard thunder again, though it was not so loud; frequently hears passing vehicles; tries to say "Put that down" when the words are spoken to her with moderate loudness.

Sept. 3rd.—Can hear if called when she is out of the room; says "ake" when I say "cake"; hears her playmates

cry, running and taking them toys to soothe them. Right membrana tympani wrinkled as if sodden; tympanic plexus visible; left membrana tympani smooth in most parts, opaque behind malleus; no plexus visible.

5th.—Has been busy making the children in the crèche say "Poor Bob" after her, and shaking them well if they failed. Heard street music to day for the first time.

13th.—Tries to say "sugar," "butter." Has tried to repeat the names of the things in the ante-room, and to call the children by their names.

25th.—Tries to pronounce the names of the things on the alphabet blocks when they are repeated to her; much difficulty with "viper."

Oct. 5th.—Can say "spoon," "apple," "no more," pretty clearly. Went into a shop and asked for "apple," which she bought.

11th.—When standing with her back to the fire she heard a cinder fall out of the grate.

14th.—Tries to repeat words she hears others mention in conversation. Was taught the word "moon" a few days ago, and repeated it on seeing the moon to-day.

Nov. 9th.—Talks better; says "Pick that up" distinctly.

30th.—Notices the railway whistle. Repeated the words "Jack Frost" after her mother. Calls her doll "Judy," and says "No, you," on hearing the words uttered.

After this date I saw no more of the child, as her parents removed to Freshwater in the Isle of Wight; but, writing on April 16th last, her mother says: "I feel very much pleasure in informing you that my little girl has very much improved in her hearing, and wonderfully in her talking. She can say distinctly all her alphabet, and count her figures up to 10. She will say, 'Dadda made that,' 'Mamma gone out,' 'Tea, please, mamma,' but she cannot manage more words in one sentence."

From Aug. 26th to Sept. 13th both Allen's and Politzer's nasal bags were employed, but subsequently Allen's alone, in consequence of the child's resistance to Politzer's. The only additional local remedy was an iodine embrocation applied, but irregularly, behind the ears. The treatment was obvious enough. She was unsuccessfully treated a year or two previously, but only during a short period, I believe; and a friend of her mother's informed me that she had on former occasions attempted to teach her various words, but being imperfectly heard they were speedily forgotten. From the above report, in which only *new* manifestations of speech and hearing are detailed, it appears probable that had treatment been delayed much longer the child would have become permanently deaf and dumb. This case also shows the desirability of watching patients after scarlet fever, to note if their hearing is impaired, before ceasing to attend them.

The pathology was evidently moist catarrh of the middle ear, with occlusion of the Eustachian tube; and when the latter was kept permanently open by means of the nasal bag, the fluid gradually escaped, and the structures regained their normal state, though probably some thickening remained. The progress was therefore rapid until the fluid was removed, evidenced by the sound becoming dry on the use of the nasal bag; afterwards the remaining congestion subsided only slowly, though steadily, the order in which sounds became audible being apparently, first, grave tones, like thunder and the rumbling of vehicles, then sharper ones by degrees, ending with the railway-whistle.

The child suffered from gastro-enteric catarrh, due to improper food, but was well in other respects, and appeared very quick and intelligent.

St. Leonard's-on Sea.

## THE SETON IN CHRONIC PATELLAR BURSITIS.

BY J. A. AUSTIN, M.D.

THERE are two principal methods of treating the disease known as chronic patellar bursitis, or chronic housemaid's knee—viz., the *uncertain* and the *certain* method. Of the latter, one variety, I believe, consists in getting rid of the effusion in the bursal sac, and, by adopting measures for keeping the knee-joint extended, to prevent the influence of pressure, tension, or friction involved in the frequent act of flexion, which, I understand, are the great perpetuators of the mischief in these and similar cases.

There is, however, another variety of the certain method, which, though it may be said by some that it is neither so elegant nor convenient as the former, is yet as expeditious as any, and certainly cannot be surpassed for its certain and satisfactory results. I allude to the treatment by the seton.

To enter into a few details. The seton, composed of a double silk thread moistened in weak carbolic oil, is conveniently passed through the same cannula which draws off the fluid, and in certain circumstances, where the avoidance of pain is urgently required, the ether spray will be found a great boon. Too small a trocar is not to be selected, or the apertures will be apt to close up and obstruct the discharges. To have to enlarge them afterwards would be exceedingly disagreeable. A pad of lint, moistened also with carbolic oil, covered with gutta-percha tissue, and the whole secured by a few turns of a bandage, is both agreeable to the patient and helps to maintain the patency of the apertures. The seton should be drawn every morning, in order to present a fresh portion of it each time to the suppurating interior, and the pus encouraged to ooze out by frequent and gentle pressure with the fingers. In five or six days the seton may be withdrawn, and after five or six days more of rest the patient may be allowed to walk about. Should any congestion or weakness be left behind, it is effectually overcome by the local use of the cold douche.

Iodine, blistering, pressure, and even simple tapping, are very uncertain remedies, and their employment in nearly every case is merely a source of additional annoyance to both the patient and the practitioner.

Tongue, Lairg, Sutherlandshire.

## SUCCESSFUL REDUCTION OF A STRANGULATED CONGENITAL INGUINAL HERNIA IN AN INFANT FIVE WEEKS OLD, IN EXTREMIS.

BY J. T. BURGESS, L.R.C.P., L.R.C.S. EDIN.

WILLIAM S. G——, born April 10th, was the subject of double congenital inguinal hernia. For a month the child enjoyed good health, and all its functions were properly performed. On May 15th, however, the left hernia showed symptoms of strangulation. Twenty-four hours after the child was taken ill, I was sent for, and found the scrotum enlarged and bulging on both sides—the penis being reduced to a mere tubercle; the abdomen distended, highly tympanitic, and painful on pressure; the pulse weak and quick; the bowels constipated, the tongue furred, stercoraceous vomiting occurring every few minutes, and the child crying in a faint exhausted manner; in short, presenting every appearance of being *in extremis*. The right hernia was soft and easily reduced; the left was firm, lumpy, and bright on the surface, and refused, after a quarter of an hour's cautious taxis, to yield in the slightest. I then had recourse to enemata of soap and warm water, and succeeded in bringing away some fetid, brown, mucoid substance from the lower bowel; still the hernia refused to go up. I next got the unfortunate little patient into a hot bath, and fomented the part well with a soft sponge for a quarter of an hour, when, after a few minutes' careful manipulation, the bowel gradually ascended from the scrotum. Keeping my thumbs over each inguinal canal whilst the child was being removed from the bath, I applied pads and a figure-of-eight bandage in the usual manner, the scrotum at this time being quite small and corrugated. Since then the vomiting has ceased, the bowels have been regularly moved, the abdomen has diminished in size, food has been regularly taken, and the child restored to its usual health.

Cases such as this encourage us to work against hope, and persevere in the application of remedies even in an infant so young and under circumstances so unpromising.

Spilsby.

THE FRENCH HOSPITAL.—The new wing of this useful institution in Leicester-street was opened this week by the Prince of Wales, accompanied by the Duke of Edinburgh.

# A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

## GUY'S HOSPITAL.

### CASES OF OVARIOTOMY IN WHICH ICE WAS LOCALLY APPLIED TO THE ABDOMEN AFTER OPERATION, FOLLOWED BY RECOVERY.

(Under the care of Mr. BRYANT.)

THE following report (continued from page 880, vol. i.) concludes the series of cases begun at page 805. The notes were taken by Mr. C. Wood.

*Ovarian cyst; pregnancy; natural delivery; and, later, ovariotomy, followed by the application of ice to the abdomen.*—K. H——, aged twenty-six, was admitted June 18th, 1878. Family history good. No history of any abdominal tumours in family. Patient usually enjoyed good health. Lived some years in Belgium. Was stout up to the time of her marriage three years ago, but had been gradually getting thin ever since. Had had two children, both of whom were living and well. Had easy confinements each time, and did not suffer much while carrying her children. Subject to headache, and neuralgia in right side of head and temple, accompanied by febrile symptoms.

Twelve months ago patient became pregnant for the second time. At three months abdomen was as big as at full time; at six months she suffered a good deal of pain for three or four days in the left side, about the level of the umbilicus, but she was delivered at full time of a living child. There was no difficulty in her confinement, but after the uterus had expelled its contents and contracted, it was noticed that there was very little diminution in the size of the abdomen. She progressed perfectly well up to fourteen days after delivery, when she had a severe attack of pain in the right iliac region, which after a few days passed to the left iliac region and then disappeared. She received medical advice for it, and was treated by enemata and the external use of iodine. After this time her abdomen steadily increased in size, and she became wasted. She then had medical advice, but as there was some difference of opinion as to the diagnosis and proposed treatment, she was advised to apply at Guy's.

On admission, patient was a tall thin woman, well made, of fair complexion and a cheerful manner. She complained of enlargement of her abdomen, of wasting, and of some slight stomach derangement. The abdomen was uniformly distended. The umbilicus retained its place in the median line of the body, and its usual relative position to pubes and xiphoid cartilage. The skin over it was tense, rather thinned, and glistening, but could be lifted up from off the subjacent tissues in every direction. On percussion, the whole of the front of the abdomen, from the ensiform cartilage to a little above the pubes, was dull; this dulness was continuous with that of the liver, the inferior border of which organ could not be felt. The only place where resonance was perceptible was in the back part of either loin. No alteration in the area of dulness was effected by changing the position of the patient. On tapping any one part of abdomen with the finger, a distinct sense of fluctuation could be felt at the opposite side of abdomen. On palpation it was impossible to feel any solid matter, owing to the tenseness of the abdominal walls. On auscultation no sounds of any description were audible. On vaginal examination, uterus appeared normal, was not enlarged, was quite movable; cervix healthy; os fairly small. Indistinct fluctuation could be obtained by tapping on the abdomen while the finger was in the vagina and pressing upwards. Measurements of abdomen:—From umbilicus to xiphoid cartilage, fifteen inches and a half; from umbilicus to pubes, eleven inches and a half; round abdomen at level of umbilicus, fifty inches. Ordered full diet. Heart, lungs, and kidneys apparently healthy.

June 21st.—A small incision, about one-third of an inch in length, was made through the skin at a point midway between the umbilicus and pubes, and in the median line of the abdomen. A medium-sized trocar and cannula was passed in, and a quantity of thick glutinous fluid of a dirty-brownish colour escaped. This was allowed to drain until the cyst had fairly emptied itself, then, the cannula being withdrawn, the parietes of the abdomen were folded on themselves, a pad of lint applied, strapped on, and a flannel bandage over all. When the fluid had been drawn off, a small solid lump could be felt by placing the hand deeply down on the tumour. The fluid was found to measure eleven quarts; it showed a thick deposit on heating, upon which acetic acid had no effect. Specific gravity of fluid 1008. On microscopic examination there was found granular matter, fat-cells, and a few plates of cholesterin. Evening temperature 99·7°; pulse 80. Felt weak, but had no pain.

22nd.—Temperature 98·4°; pulse 78. Slept well. No pain in abdomen.

23rd.—Temperature and pulse normal. Patient got up and sat in the ward. Bowels open; no pain in abdomen.

25th.—Left the hospital to remain in the country until after her next menstrual period. The abdomen had increased a good deal in size during the four days following the tapping, and measured thirty-two inches at the level of the umbilicus. Appetite good; general condition improved.

July 30th.—Readmitted into the hospital, to the private room in Astley Cooper ward. Patient appeared to be in very good condition; general health had improved since the tapping, but the cyst had refilled rapidly, and abdomen was again a good deal distended; the skin over it showed the marks of the previous over-distension. Measurement round body, at level of umbilicus, forty-four inches.

31st.—Temperature 98·6°; pulse 80. Slept fairly well during the night. Had an enema early in the morning, which acted well. At 11 A.M. had a light meal of a little chicken, with brandy. At 3 P.M. the patient was placed on the operating couch, and the mixture of alcohol, chloroform, and ether having been given, Mr. Bryant proceeded to operate. An incision was made through the skin, along the median line of the abdomen, from just below the umbilicus to three inches above the pubes. There was very little fat. The cyst was at once exposed, and the finger passed round between it and the abdominal walls. The trocar and cannula was then introduced, and a dark-coloured fluid drawn off; but very soon the cyst tore away from the claws of the cannula, then a large rent took place in the upper part of the cyst, and some of the fluid, with a few small loose cysts, escaped into the abdomen. The skin incision had then to be enlarged upwards to the extent of about four inches, so as to get to the upper part of the cyst. The cyst was held up to the opening in the parietes, and the fluid emptied out by means of sponges. It was then found that it contained a number of small secondary cysts, and also that there were adhesions between the main cyst and the abdominal parietes, and slightly to the liver and stomach. All these adhesions had to be gradually broken down, and the whole cyst being drawn out of the abdomen, the pedicle was embraced by the medium-sized clamp, and the cyst cut off. Then the whole of the abdominal cavity was cleared out by means of sponges soaked in iodine water. Several small vessels were twisted, and two small pieces of omentum ligatured with catgut, but there was still a little oozing from the under surface of the parietes, where the adhesions had been torn away, when the wound was brought together. This was done by seven rather thick silk sutures, left long for facility in removal. The extremity of the pedicle, with clamp attached, was left outside the wound, which was dressed with thymol gauze, and slight pressure applied. The patient was then carried back to bed, and a pillow was placed under the knees, which were bandaged together. A morphia suppository was given at once. To have ice to suck, and bags of ice to be applied to abdomen. The quantity of fluid drawn off was two gallons, two quarts, twelve ounces, and resembled that drawn off at the preliminary tapping. The cyst was found to be unilocular, with very thin, almost transparent, walls, and to contain a number of small loose cysts, and also about four of the size of a walnut attached close to the pedicle, which was long and rather thin. At 5.45 P.M. the temperature was 98·8°; pulse 80. She seemed quite to have recovered from the anæsthetic; there had been no sickness.—10 P.M.: One and a half ounces of urine drawn off. Patient seemed fairly well; had slight pain; complained of thirst. Had a hypodermic of morphia.

August 1st.—4.45 A.M.: Six ounces of urine drawn off. Slept for several hours after the injection. Had not much pain. Complained of feeling very hot.—9 A.M.: Urine (six ounces) drawn off. Hypodermic repeated.—10 A.M.: Temperature 100·4°; pulse 100. Skin warm and moist.—4.30 P.M.: Urine drawn off. Had been sick once.—8.30 P.M.: Urine drawn off. Suppository given.

2nd.—Morning: Temperature 102·4°; pulse 112, small and hard. Abdomen soft, merely smarting pain about wound. Urine drawn off at 3 and 9 A.M. Slept very fairly. Evening: Temperature 102°; pulse 100. Urine, sp. gr. 1024; slight deposit of urates; no albumen or phosphates; three hours after being passed began to smell ammoniacal.

From the 4th to the 7th the temperature ranged from 100° to 101°, and then fell to the normal level, where it remained until the 15th. On the morning of the 17th the patient had a shivering fit, accompanied by headache, and the temperature suddenly and rapidly rose to 102·2°, falling to 100° within four hours. Next day (18th) the temperature was almost normal, and did not again rise.

The sutures were removed on the 6th, the edges of the wound being in good apposition. Two days later the wound seemed to be entirely healed, but the skin around it was red, swollen, and hard, and there was evidently a little suppuration at the upper part of the wound. The clamp also had a fetid odour. For several days some pus escaped from the suture-holes at each dressing. The clamp, which, in spite of the application of terebene or carbolic acid, continued to smell very offensive, came away on the 18th. On the 22nd a small abscess, about the size of a walnut, was opened, and some thick pus let out. Although slight suppuration continued for nearly a week later, the patient's general condition gradually improved, and she left the hospital cured on October 1st.

## CHILDREN'S HOSPITAL, BIRMINGHAM.

### TWO CASES OF LEUKÆMIA; DEATH.

(Under the care of Dr. WELCH.)

FOR the following notes we are indebted to Mr. R. L. Rutherford, registrar.

CASE 1. — T. H——, aged five, was admitted on Feb. 6th, 1879. Father healthy; mother a great drunkard. Fifteen other children had been born; eight alive and well; the other seven were either still-born or died a few days after birth. The patient had "convulsions" and whooping-cough two years ago; in August last, scarlatina. Six weeks previous to admission the right eye commenced to swell, causing intense pain. Two weeks later the right half of the face became paralysed. The child had always been neglected.

On admission the patient was very emaciated, and had a peculiar, white, waxy appearance. The right half of the face was paralysed; the tongue, however, being unaffected. There was a swelling over the right zygoma, and the veins over this swelling were somewhat distended. The right eye was completely disorganised. The superficial lymphatic glands throughout the body were felt to be slightly enlarged, and increased in consistence. The spleen felt hard, and extended forwards almost to the middle line, downwards to about the level of the umbilicus. The liver was also enlarged, tender on pressure, and firmer than normal, extending downwards two inches and a half below the margins of the ribs. On examining the blood microscopically, the white corpuscles were seen to almost equal the red ones in number. Temperature 100·4° F. Heart-sounds weak, but normal; respiratory system normal; sordes on the teeth; tongue dry and brownish; bowels constipated; urine normal. Ordered one drachm of the syrup of the lacto-phosphate of iron and lime.

Feb. 14th.—In the night the patient had a severe attack of epistaxis. The anterior nares were plugged with lint, and four drops of turpentine in mucilage ordered every three hours. Temperature 103° F.; evening temperature 102·4° F.

15th.—Had been sick several times, the vomited matter being streaked with blood. Temperature 101° F.; evening temperature 102°.

19th.—Hæmorrhage from the bowels last night; sickness at intervals. Temperature 101° F. At 5 P.M. the patient rapidly became worse, and died collapsed at 6.30 P.M. No post-mortem examination allowed.

(Under the care of Dr. MARSHALL.)

CASE 2.—Charlotte R——, aged fourteen months, admitted 26th February, 1879. Family history good. No history of syphilis or any other hereditary disease; eldest brother of patient was an albino. Child hand-fed, was never suckled; had been unwell since birth.

On admission she was emaciated; muscles soft and flabby; hair and eyelashes white, eyes pink; a few purpuric spots on neck, body, and limbs. Circulatory and respiratory systems normal. The abdomen was enlarged. The spleen could be felt distinctly, but was not much increased in consistence; it extended downwards as far as the crest of the ilium, forwards as far as the left mammary line. The liver extended for about two inches below the margin of the ribs, and was somewhat tender on pressure. The superficial lymphatic glands throughout the body were enlarged. Under the microscope the blood was seen to contain one white corpuscle to about seven red ones. Ordered the following mixture every four hours: two grains of citrate of ammonia and iron, two drops of arsenical solution, three drops of aromatic spirits of ammonia, in one teaspoonful of water.

The child gradually sank and died on March 14th. There were no hæmorrhages or other complications.

*Necropsy, eighteen hours after death.*—Rigor mortis almost absent. The brain and membranes were very pale and almost bloodless; the substance of the brain was firmer than normal, otherwise healthy. There were pale, soft clots in the sinuses of the dura mater. No excess of fluid in the pleuræ or pericardium. Bronchial glands enlarged, and firmer than normal. Lungs very pale, and emphysematous along anterior margins; otherwise normal. In the right ventricle was a pale, soft, almost puriform clot; left side of heart empty; valves healthy. The spleen was five inches in length, three in breadth, and two and a half in thickness; weight five and a half ounces; consistence increased. On section, the parenchyma was bluish-red, of a dull lustre, and somewhat granular; the fibrous trabeculæ were very prominent; the Malpighian corpuscles were distinctly marked from the pulp by their whitish appearance. There was also a supernumerary spleen, the size of a marble, which resembled the above in all particulars. The lymphatic glands in the mesentery were enlarged, and resembled the spleen in colour and consistence. The liver was enlarged; weight thirty ounces, pale and hard. Kidneys normal; the supra-renal capsules were enlarged, and changed into a greyish-yellow, cheesy mass. In the small intestines Peyer's patches were raised one or two lines above the mucous membrane, having steep edges; they were firm, and on their surface variegated vessels were seen; the patches were not surrounded by a vascular ring. In the large intestine the solitary glands presented a similar appearance.

# Medical Societies.

## OBSTETRICAL SOCIETY OF LONDON.

### THE USE OF THE FORCEPS.

THE adjourned discussion on the 2nd inst. was opened by

Dr. ROPER.—In considering the question of the frequent use of the forceps, as now before the Society, it is important to confine our observations to natural labour, to the exclusion of every kind of complex labour. But as we hardly ever use forceps in a perfectly natural labour—that is, a labour free from all factors of difficulty, we must have some indications of slight difficulty for which it is justifiable or desirable, if not absolutely necessary, that forceps should be used. In what I have to say, I will speak—first, from observation, from clinical experience; and, secondly, I will make some statistical remarks. The labours to which I have been called to use forceps have been of two kinds; but my observations for the present have reference to the second stage of labour only. The first kind of labour to which I wish to call attention is a lingering, feeble labour, mostly occurring in women who have had many children, in whom the uterine force is very feeble from the beginning to the end of labour. The pains are very slight, and occur only at long intervals, and the labour is protracted simply through uterine atony. The soft parts are very lax, and offer but

little or no resistance; the child's head lies loosely in the pelvic cavity, and can easily be moved about in any direction; there is no pressure on the maternal soft parts, and no constant contraction of the uterus to arrest the fœtal circulation. Such a labour, however long it may last, will almost always terminate naturally by expectancy. It may seem to the patient, her friends and attendants, that delivery is desirable; yet certainly it can but rarely be absolutely necessary. If in such a case we decide to deliver with forceps, I have never regarded it as good practice to do so without using ergotine by subcutaneous injection. Frequently, however, the manipulation which is necessary in applying forceps will stimulate both the uterus and the reflex and voluntary expulsive efforts of the patient. I do not trust to ergot alone as an alternative to forceps; but I use it as an adjuvant. Although ergot generally stimulates the uterus to increased action, it does not always succeed in expelling the child. The uterus under the influence of ergot seems at times to contract on the child, and thus by its continuous tonic action will speedily destroy the life of the child if it be not quickly liberated from this vice-like pressure. When its influence is expulsive I would give it a chance of effecting delivery; but I would not wait longer than ten minutes after the uterus had become ergotised before applying forceps. If there be any efficacy in pressure on the fundus uteri to expel the child, this is the kind of case in which it ought to be useful; but I place no reliance on it as an operation *per se*. I believe we cannot thus squeeze out a child as we express the placenta. I was glad to hear that at the last meeting of the Society it received the condemnation of Dr. Lombe Atthill. I have heard this manœuvre spoken of as "shoving" children out. We must bear in mind that while the process of "shoving" children out is a mere mechanical proceeding, yet the manipulation of the fundus uteri to effect this will frequently act as a stimulant to the atonic uterus, and cause it to act. In many patients with lax uterine tissue and a flabby state of the soft parts of the outlet, the child is ready to drop out without giving the patient much warning. The second kind of labour is of an opposite character to that just described. This labour for the most part occurs in primiparous women who are young and robust, in whom we get a powerfully acting uterus, pains of a forcibly expulsive kind occurring frequently, and the expulsion of the fœtus being resisted by rigidity or tonicity of the soft parts of the outlet. In such a case we see the head forcibly thrust down with each pain on the soft parts of the floor of the pelvis, distending the perineum to the thinness of parchment, and yet it does not come through. On cessation of the pain the head retreats quite back into the pelvic cavity, all tension is relieved, the maternal soft parts are freed from pressure, and the placental circulation is restored during the interval between the pains. Very many pains may occur and a long time elapse before the head is protruded, but so long as the uterus continues to act thus forcibly and rhythmically the use of the forceps is contra-indicated. Nature seems to be admirably using a force little by little; the progress of the head is very slow, but is nevertheless certainly going on. During all this time two conditions are being brought about which facilitate delivery—namely, relaxation of the rigid soft parts and moulding of the fœtal head. If a greater force were applied at one time, as in delivery by forceps, severe stretching, bruising, and tearing might reasonably be expected. It may, however, happen that the powerfully-acting uterus in the end is unable to overcome the rigidity of the soft parts of the outlet. We are warned of this approaching failure by the pains becoming less forcible and occurring at longer intervals; there is less movement or progress of the head with each pain; the uterus, as felt through the abdominal wall, is becoming persistently hard from tonic contraction; on making a vaginal examination the head will be found immovably arrested or impacted; the labour finally has come to a standstill. This is a state of things which experience ought to teach us to anticipate. We ought not to allow of protracted laborious labour to run on to a state of dead-lock; sound judgment directs us to supplement the failing powers of nature by the timely use of the forceps before the breakdown takes place. The highest degree of refinement of judgment will here manifest itself in directing us when we should use forceps, and the same refined judgment will admonish us when we ought not to use them. I not unfrequently hear of perineums being ruptured through into the rectum by the premature use of the forceps—misfortunes which, I believe, would not have occurred if the cases had been left to expectancy. The two casts exhibited represent in the one case a large round head born in a feeble lingering labour, the mother having had fifteen children at full term. Ergot was given in the second stage of labour, which severely ergotised the uterus, and the child was not expelled till after it had been squeezed to death. The second one represents the head of a child extremely moulded, having been left a long time in a laborious first labour, so long as to be fatal to the child, delivered by forceps. Doubtless the timely use of the forceps would have saved the lives of both these children. One child lost its life by ergot, the other by expectancy too long continued. I will now speak of the application of forceps in the first stage of labour—that is, in a labour where the factor of difficulty is a tedious lingering dilatation of the os uteri, accompanied by pressure on it of the bag of membranes or of the presenting head itself when the liquor amnii is discharged. It is alleged that pressure of the head on the os uteri, especially after the escape of the liquor amnii, is a source of danger to the life of the child, and productive of serious consequences to the maternal structures, if not to the life of the mother; and therefore, to avoid these dangers, it is desirable, if not absolutely necessary, to effect delivery with forceps even where the os uteri is only two-fifths, three-fifths, and four-fifths dilated. The existence of such dangers during the first stage of labour has not been observed in my own experience. I have never seen a single case of death of either child or mother, nor damage to the maternal structures, from a protracted first stage of labour. I am, of course, speaking of labours which are otherwise natural excepting a rigid state of the os uteri. I would here observe that by rigidity of the os uteri is meant that condition of structure which consists in mere physiological rigidity such as we get in the tonicity of the soft parts of young, robust primiparæ. All structural diseases of the os being excluded, we must also omit that very rare form of difficulty, trismus of the uterus. We must also take great care to omit all other causes which really belong to the domain of complex labour. Let us, then, take a simple case of rigid or slowly dilating os uteri, such as we most commonly see in first labours—say two-fifths dilated. Let the membranes be ruptured, and then we have the head itself pressing on the os with each pain, and receding from it when the pain ceases. The discharge of the liquor amnii will necessarily cause the first stage of labour to be protracted and somewhat more painful than when the membranes are entire; every practitioner of experience will be prepared for this as a natural consequence. But in such a case there is no continuous pressure. The uterus does not, in the first stage of labour, take on a persistent contraction, as it does when exhausted after a prolonged laborious labour in the second stage. No impaction of the head can happen in connexion with the first stage of labour. I am now speaking of a case where the head is above the brim at the commencement of the first stage of labour. When the head is pressed down on the os this is gradually expanded, the long axis of the uterus is shortened, and as the os is drawn up over the head the head is forced through the brim down into the cavity of the pelvis. If the whole pelvis be normally formed, the head will always be driven down on the os; if, however, the head does not descend on the os, but lodges on the brim during a pain, then we must seek for some disproportion or other cause of complex labour. I think it of the highest importance to keep up a wide distinction between a head above the brim which does not come down because it is obstructed, in the one case by the brim itself—a bony obstruction—and in the other by the rigid os and lower segment of the uterus. By the time the first stage of labour is completed in a perfectly natural labour, we may take it as a certain rule that the head will be down in the cavity of the pelvis. If, when the os is nearly fully dilated, the head remains above the brim, we may reasonably expect some complex form of labour, probably a conjugate contracted in a small degree. If we elect to apply forceps because the head which is pressing on the os does not speedily or readily dilate it, it seems to me that we are not simply assisting labour, but that we are really anticipating it, converting a physiological process into a mere mechanical proceeding. It is actually a forced kind of delivery, such as we are at times obliged to have recourse to in certain complex labours attended with imminent danger to the life of the mother. In such cases I have frequently seen the os uteri and head dragged down together, so that the rim at the os has been seen at the vulva. Dr. Lombe Atthill mentioned at the last

meeting of the Society three highly instructive cases: the first showing what may be done in the hands of a skilful and experienced operator; the second the damage done, even to the destruction of the mother's life; and the third in which he desisted in his efforts to deliver through a fear of lacerating the os, and the child was born naturally eight hours after—a triumph of expectancy. Dr. Collins, in his "Practical Midwifery" (page 16), has made an observation which is in accordance with my own experience—namely, that the death of the child as a rule precedes injury to the maternal structures, so that whenever a child by stethoscopic examination is found to be alive we may take this fact as presumptive evidence of the safety of the maternal structures. In twelve thousand cases in the Royal Maternity Charity, though I have seen several cases of children still-born from protracted labour, not one case of sloughing or even severe inflammation of the maternal structures has occurred. It is said by some of those who advocate the frequent use of the forceps in the first stage of labour that the instrument should only be used when the os is dilatable; it seems, therefore, that the forceps are employed in cases where no necessity exists for their use, for the head pressing on a dilatable os will soon expand it. There is a class of cases belonging to neither feeble lingering labour nor to the exhausted condition of laborious labour, such as we see in very nervous women, whom it is desirable to deliver by forceps. Such women bear their pains badly; they are unskilful in their efforts to assist the uterine force by their voluntary efforts; on the contrary, they do all they can to retard delivery by screwing themselves into attitudes unfavourable for delivery. It is good practice to place such women under the influence of chloroform, and deliver them with forceps, provided there be no contra-indications. In the prolonged first stage of labour, caused by rigidity of the os, when the patient is wearied and fatigued (not exhausted, for the term "exhaustion" is here continually misused), my practice has been to give opium or repeated small doses of chloral, or to use the inhalation of chloroform to a mild extent, with a view of procuring rest, giving, at the same time, easily digestible nourishment. It is also important to assure the surrounding friends of the safety of such a labour, though it will, of necessity, be protracted, and thus save the patient from their incessant worry and importunities that something should be done to deliver the patient forthwith. I will now refer to the frequent use of the forceps in ordinary practice, such as we know to be a custom of the present time. Many practitioners are in the habit of taking forceps with them to every case of midwifery to which they are called, and whenever any delay takes place the forceps are forthwith applied without the existence of any factors of difficulty. The instrument cannot be said to be used in such cases in the interest of either mother or child; the best that can be said in favour of such practice is that it diminishes the duration of maternal suffering; and this it may do, but against this diminution of prolonged suffering of a slight kind we must place the intense pain of rapid delivery by forceps, the risks of injury, post-partum hæmorrhage, trouble with the placenta, and the after-effects of subinvolution caused by not allowing the uterus to do its own work. I cannot help thinking that much of the gynæcological work of the present day results from this frequent interference with the natural functions of the uterus in childbirth. We must all have observed the good gettings up of women who have gone through severely laborious labours, probably a consequence of vigorous uterine action tending to produce good involution. The remarks of Dr. McClintock on the question of the frequent use of the forceps in ordinary midwifery practice, in one of his annotations in editing Smellie's works (vol. i., p. 271) are so excellent that I cannot forbear quoting them. He says:—"I can well understand that, provided this powerful agent be employed by skilful hands under the direction of experienced heads, it may be employed at the rate of *one* in *ten* with perfect safety to mother and child, and with great saving of pain to the former and of time to the operator. But I maintain that more than two-thirds of the patients so delivered would have fared just as well had no instrumental assistance whatever been given. In simply tedious labours, the exact time at which the forceps may be advantageously interposed must depend a good deal on the operator; the risk from the instrument being so much less with a good than with a bad operator. The former need not wait so long for a natural termination as the unskilful should do. Moreover, we should never forget that the *practicability* of using or applying the instrument is totally different and distinct from the *advisability* of doing so." Also, in speaking of the use of forceps in the first stage of labour, he says: "But its employment under these circumstances is quite exceptional, and can only be regarded as a resource of which a skilful operator may avail himself in cases of extreme urgency." I have here a record of 9389 cases of my own in the Eastern Division of the Royal Maternity Charity. I used the forceps 80 times in those 9389 cases. The total number of fœtal deaths with forceps was 17; total number of maternal deaths with forceps, 2; total number of cases of craniotomy or cephalotripsy, 13; total number of deaths after craniotomy or cephalotripsy, 2; total number of still-births in total deliveries, 300; total number of maternal deaths from all causes, 32. Then I have given the factors of difficulty in forceps cases, and gone through the whole of them in this way: maternal deaths with forceps; craniotomy deaths with forceps; and so on. Then I have given maternal deaths from all causes in chronological order. Then I have taken these 9389 cases and compared them with the practice of Dr. Johnston and Dr. Collins. I have done this because Dr. Johnston's practice represents a high rate of mortality, Dr. Collins's a low rate of mortality, and my own practice a middle rate of mortality. There is one explanation that ought to be given of the table with regard to the number of children still-born after the use of the forceps—54. Sixty children delivered by forceps died very soon after delivery. That is an important clinical fact. If we deliver a child before the head has had time to mould or the maternal structures time to relax, we put such a pressure upon the head that, if the child is not stillborn, it dies soon after birth. In Dr. Johnston's 7862 cases there were 58 cases of maternal death. That is an important number that I shall have to refer to again. I must make one observation as to the total number of still-births. The number was never added up during his mastership, except in the first three years; and then it was found that the death-rate was about 6·10 per cent.; and I have calculated the entire number of seven years at that rate, which would bring the total number of still-births to 468. Having given the numbers in each case, I will compare the rates. In the total deliveries at the Rotunda Hospital under Dr. Johnston the forceps were used in 1 case in 10; in my own practice in 1 case in 117; in Dr. Collins's practice, at the Rotunda, 1 in 608. The rate of fœtal deaths in forceps cases is—Dr. Johnston, Rotunda, 1 in 14; Dr. Roper 1 in 4½; Dr. Collins 1 in 3. There is a seeming advantage in favour of Dr. Johnston; but then we must remember that he used the forceps in a large number of easy cases, and therefore the children ought to be born alive. My own cases were very difficult ones, and so were Dr. Collins's; therefore this series of cases may stand for nothing. In my own 300 cases there was hardly a still-birth, one being that of a syphilitic child. Then these children were all living children, and of vertex presentations. That is a process that must go on *ad infinitum* under such circumstances; but when we have a residuum of difficult cases the things are not comparable. As to the rate of maternal deaths, Dr. Johnston's is about 1 in 13, Dr. Roper's 1 in 40, Dr. Collins's 1 in 6. Dr. Collins's rate was, of course, large, because he allowed the women to drift on to difficult labour. The rate of craniotomy or cephalotripsy cases is — Dr. Johnston about 1 in 281, Dr. Collins 1 in 208, Dr. Roper 1 in 722. The rate of deaths in craniotomy or cephalotripsy was not large. The next two series of cases are the most important of all. First, the rate of total still-births in total deliveries. In estimating these cases we must take the entire number, and not choose classes of cases. Dr. Johnston loses 1 child in 17, Dr. Roper 1 in 31, Dr. Collins 1 in 15. Now, if we take the 60 cases that were born dead under the use of the forceps in Dr. Johnston's practice, we shall find that will reduce his infantile mortality to pretty nearly the same rate as Dr. Collins's. The next series is a very important one indeed, and I call it something dreadful—the rate of maternal deaths from all causes to total deliveries. Dr. Johnston loses 1 woman in 47, Dr. Roper 1 in 293, Dr. Collins 1 in 100. Now it may be said that there is an excuse for this amount of mortality in the practice of Dr. Johnston, who loses six mothers to my one, because mine is an external charity, and his is an internal charity. But that does not apply to Dr. Johnston's cases more than to Dr. Collins's, because they occurred in the same charity—the Rotunda Hospital. There is, however, this difference, that under the mastership of Dr. Collins 16,000

women were delivered, while in Dr. Johnston's time only 8000 were delivered; so that, taking it for granted that the building is the same, it must have been very much overcrowded in Dr. Collins's time, and not in Dr. Johnston's. Moreover, Dr. Collins had an epidemic or endemic attack of puerperal fever, in which he lost 58 patients, whereas Dr. Johnston had no such epidemic. Dr. Johnston endeavours to account for his high mortality by the fact of the women going into the hospital from districts that were affected by zymotic diseases. But it does not appear that the women died of zymotic disease. They died of the ordinary puerperal diseases to which women are subject. On the other hand, the patients of the Eastern Division of the Royal Maternity Charity live in the courts, alleys, and narrow streets of Spitalfields, Shoreditch, Whitechapel, Bethnal-green, &c., where there are always some of these zymotic diseases prevailing. I hardly ever go into a house there without finding some zymotic disease; and that is where these women are confined. I do not see, then, how we can say that the rate of mortality is diminished by the use of the forceps; on the contrary, I think it is much increased. The first thing that would strike one is, that the mortality was increased by the frequent use of the forceps in the first stage. But, singularly enough, that is not so; for in the 752 cases recorded, the death-rate was 1 in 13; and in the 169 cases where the os uteri was two-fifths, three-fifths, or four-fifths dilated, there were only 9 deaths, or 1 in 19; so that the deaths where the forceps were applied in the first stage of labour are not so numerous as where the forceps were applied in the second stage. Dr. Johnston states that he never uses the forceps unless there is imminent danger to the mother or child, and that he always used them to prevent sloughing. He says, at page 13 of his own report, that there were eight cases of sloughing of the perineum, and that he did not allow labour to be prolonged so far as to produce any of the symptoms indicative of vaginal inflammation, considering it to be safer to interfere before such should appear. I can only say that I have attended twelve thousand cases, and I have not seen a case of sloughing; and Dr. Collins, who has attended sixteen thousand cases, has only seen one case of sloughing. I feel that it is unnecessary for me to compliment Dr. Barnes on the able manner in which he has brought this important subject before the Society; nor can I conclude my remarks without expressing my thanks to Dr. George Johnston for the publication of his practice and its results, and in this I believe every Fellow of the Society will join me. I can, however, only regard his practice as a great experiment, carried out with a view to demonstrate that the frequent use of the forceps tends to save both fœtal and maternal life in childbirth; but in its results the experiment has failed to prove that it has this fortunate tendency.

DR. BRAXTON HICKS.—I should not have risen to speak on this subject had not our alma mater called upon us individually to express our opinion upon it; the more so as I have already written some remarks which will be found in the Transactions of the Obstetrical Society in 1867 on the condition of the uterus in obstructed labour, and an inquiry into what is intended by the terms "cessation of labour pains," "powerless labour," and "exhaustion"; and there is also a lecture of mine published in the *Medical Times* five or six years ago, putting the matter more simply for the benefit of my students. We may look upon these matters from two points of view. There is first the general practitioner's view, the view of those who attend upon ordinary labour cases; and then there is the view of those who are not called in until after a labour has progressed for a long time. If we look at these cases in our own particular way, we who are called in consultation are apt perhaps to overrate the numerical frequency of the severe cases, while others are perhaps a little inclined to underrate them. It is by bringing us together and hearing our different opinions that something like a reasonable conclusion can be arrived at. I think it will be the better plan to take the line which is indicated in the *précis* for our argument or discussion. I will first refer to other two alternatives, chloroform and turning. It sometimes happens, when a woman must be delivered, and we have no instrument at hand, that turning is efficacious and successful. With regard to chloroform, it will appear from what I am going to say, how far it will assist and be a real alternative. There are two questions asked. One of these is, does lingering labour occur so as to entail danger to the mother and child during the first stage of labour? I would simply answer, Yes, unquestionably. I have seen a considerable number of women—more than I should like to see again—who have been sacrificed because the fœtus has been held *in utero;* there has been trismus in the uterus, and the fœtus has been held in, when the woman might have been delivered with facility. Then, is the application of the forceps necessary or useful before dilatation of the cervix? Certainly. *How often* is a matter of further consideration, but that there is a necessity sometimes cannot be doubted. Cases rise before my mind which are examples of this, but I will only answer the question in the affirmative. If I could not have answered it in the affirmative, I could not have gone into the discussion of the other propositions, the second and the third. I take those first because they embrace simpler conditions, and the others will almost be answered by the time I have finished the second and third. We have two propositions put into one. "In lingering labour when the head is above, or engaged in the pelvic brim, and when it is known that the pelvis is well formed, the forceps is better than its alternatives." It is impossible to discuss a question like this without going more specifically into the causations of lingering labour. I have been forestalled by what has been said by Dr. Roper, or rather I have forestalled him, because in the publication to which I have referred you will see the whole thing stated. There are two typical, opposite conditions of labour. Before we discuss them it will be better to inquire what are the difficulties in the first stage of labour, and where they lie. They are very few indeed. There is inertia of the uterus, and there is the overaction or trismus of the uterus, and there are intermediate conditions between these. Then there is spasm of the lower segment of the uterus almost akin to the other, and of the os uteri. Then we have slight obliquities of the uterus which interfere with the progress of the child. Then sometimes the child gets a little doubled up, and cannot descend; the uterus does not act upon it sufficiently. Sometimes we have a toughness of the membranes as a cause of detention. When we know what is likely to occur in the first stage, limited as we are to the uterus in this discussion, we can pretty clearly argue on the whole matter. First, we have the condition of the uterus as a motor power. There is a deficient action, a slow opening of the os uteri, long intervals, perhaps many hours, between the action of the uterus; the liquor amnii may or may not be discharged; it had better not be discharged in more prolonged cases. Now as long as cases go on like that, we shall, I think, all agree that there is no reason for any interference. If you do interfere you may have an atonic uterus after delivery, non-expulsion of the placenta, and perhaps post-partum hæmorrhage. In these cases length of time is not of the smallest consequence. As I have pointed out in my paper, it is important to understand that death is not likely to occur in a woman from simple detention in the first stage, so long as the pulse is not rising. The only condition in which we might make an exception is where the fœtus has been already dead before labour has set in and the liquor amnii has escaped; the fœtus then decomposes, and the patient gets into a septicæmic condition, which may go on, without expulsive pains, to death. But that is a very rare condition. Of course there is the case of lesion of the uterus, but we are not permitted to discuss that now. In the cases to which I have referred we need not go about in fear and dread that the patient will die of exhaustion. I have never seen it, and do not think anybody else has. As to the opposite condition of trismus, I have related the symptoms of it in my paper. The uterus is tightly round the child; there is no flaccidity about it; there is no dulness outside the fœtal shape; the fœtus is fixed, you cannot move it about. It is a thing to be easily made out if you are careful in examination, and not too much in a hurry to take your hand off the uterus. It is very important to recognise the first stage of this, because it is upon the arrival of the first stage that we are stimulated to act. When the uterus takes this particular form of action it is very seldom that you get the fœtus expelled by natural efforts. These cases are not so uncommon as you may suppose. They show themselves not so much in the first as in the second stage. It is in the second stage, I believe, that the difficulties of the first stage accumulate, and which might be avoided. The uterus begins to be continuously contracted between the pains; the pains do not go off, and the contraction passes into the interval. When that begins the time for action has arrived. It is possible that by the use of a little chloroform (not too much or there will be no action from

behind) you may ease the contraction, or you may by small doses of opium frequently repeated get that state of irritability to subside. Or you might try the milder alternative of expression. Certainly, as a general rule, you would not use the alternative of ergot. If you begin to use ergot in the early stages when the os uteri happens to be a little tight, and the uterus not prepared for the expulsion of the child's head, you will have this irritable condition brought on by the action of the ergot, and nothing is more dangerous. I have been called in to numerous cases in which ergot has been given because the practitioner has not distinguished between the total inertia and this continuous contraction which is going on, accompanied by mild and feeble pains. As soon as the pains begin to run into the interval (that is the important point) then it is that you find the pulse begins to rise. I have watched these cases very carefully for a long period, and I can emphasise what I said in my original paper that I have seen no exception to that rule. As soon as this contraction begins to occur the pulse begins to go up, and you have nerve-irritation and exhaustion from the long continuance of the trismus condition; you have what is called powerless labour or exhaustion. It is not powerless labour; it is the contrary, it is an over-active condition. The uterus gradually gets into a continuous contraction until it becomes so hard and rigid that you cannot make the smallest impression upon it. I have seen cases where the uterus has been as tight as if it had been made of papier-maché, so solid and so unyielding in its contraction. That is an extreme form that will come on sooner or later if the woman is not delivered after the symptoms of powerless labour commence. It is a state of nervous exhaustion—Dr. Roper, I think, bears me out in that,—it is not the crushing or bruising of the parts by the pressure of the child's head that produces that condition; it is nervous irritation and exhaustion. I cannot explain it, but I can say that as soon as a woman in this condition is delivered, if she has not gone beyond a certain point, the condition begins to cease, and in a couple of hours it is all gone. If there had been any bruising or sloughing, of course that would not occur. I have watched these cases carefully, and am perfectly assured that the condition ceases very quickly after the source of irritation is removed. If the patient goes into the highest degree of trismus she will generally die; our object is to prevent that condition. It is important that the symptoms should be recognised early. Sometimes you find that the water has drained off slowly, the uterus gradually gets irritated, and the pains hardly begin at all. That, no doubt, is a very treacherous sort of case. As soon as the condition I have referred to comes on, traction must be adopted, unless, by giving chloroform or small doses of laudanum, you can produce relaxation, and so get rid of the trouble. You may get the condition sometimes when the os uteri is open, and sometimes when it is contracted. If it is an open os uteri, the condition is very simple: the forceps will go in readily and draw the fœtus out of the grip of the uterus. We can easily see that if the uterus is gripping the child, it must be exposed to great danger, and the sooner we get it out the better for the child. Statistics or no statistics, that is as plain as possible. But when we get the os uteri and the lower part of the cervix rigidly contracted, then the difficult question arises how far we should interfere. Now, supposing this is not a case in which we have mistaken this condition for the ordinary prolonged first stage of labour—which it sometimes is; suppose that it is a case in which we must begin to act. Where there is a cicatrix, sometimes the hydrostatic bags of Dr. Barnes may be used with very great effect. I have sometimes seen a case which in one labour has been three days without any dilatation, and it has only taken two or three hours in the next to get over it with the greatest ease and safety. But where there is no cicatrix, and there is only spasmodic rigidity of the uterus, so that it will not relax physiologically, then what are we to do? Some may say, Why not craniotomise? Is craniotomy, after all, such an easy operation under such circumstances? Is it less dangerous than the forceps? I maintain that it is more dangerous than the forceps. The only danger of the forceps is that you cannot get them in, or that, having got them in, in locking you may stretch the os uteri like a skein of thread on the top of the finger. There is great anxiety and danger; yet if it is done carefully it is permissible. You see, we must do something; it is no use talking of the dreadful things that may arise from the use of the forceps; we must face the danger. Then we have to draw it out very slowly. Dr. Lever has invented a pair of forceps in which the shanks come so closely together that they almost touch one another, rather inconveniently sometimes; but when it was on the child's head it scarcely stretched the os uteri at all. When you bring down the rotundity of the child's head into the os uteri you have a very good dilator. What do you ask the forceps to do? No more than you ask the uterus to do. The uterus must push it out. The forceps does no more than the uterus was asked to do by expectancy. If instead of dragging the uterus down with violence you pull it down gently, supplementing each pain, you can dilate as gently as possible; and when the rotundity of the child's head comes in you find there is no great difficulty. I never met with any great difficulty except where the os uteri was stretched like a skein of thread round the wide-spread shanks of the instrument. I had a case of a lady in a condition requiring help. The os uteri was about the size of a five-shilling piece, slightly dilatable, and the head was coming down and occupying it pretty well, distending the cervix. When I was asked to see her, before passing the forceps I fortunately examined her, and I found the os uteri perfect for an inch upwards, but there was a large slit extending upwards on the side in the neighbourhood of the broad ligament, going as far as I could reach, the head occupying the rest. I reckoned that the head at the equator had passed the major part of the rent. The question was whether I should perforate or drag the whole down to the margin. With the forceps I carefully drew down the child's head; it did not rupture the parts. The child was born alive, and is still living. The mother had not a single symptom indicating that there was any mischief. If I had not examined the patient beforehand, and if it had been found that she had laceration, it would have been put down to the forceps. In Dr. Roper's cases it will be found that there are some cases of spontaneous laceration of the cervix uteri narrated. You must not put down to the forceps everything occurring in that way. We are to face the difficulty, and face it in the best way we can. The numerical proportion in Dr. Johnston's cases certainly does not accord with my practice. Perhaps I have not had such difficult cases to contend with, nor such irritable patients as the Irish. The Celtic nervous system is much more irritable than the Saxon, and we ought to take that into account in considering these cases. In the Celtic tribes the uterus quickly falls into a state of irritation, far more so than is the case with English women, so that Dr. Johnston may have had difficulties that we have not had to contend with. I have answered the major part of the *first* question in the remarks I have already made. The lower the head comes down the more quickly will the uterus get into a state of irritation, whenever arrest takes place. In the second stage, when the head is in the cavity of the pelvis, and the uterus is a little inactive, I have used ergot without fear, because, with the forceps by my side, if I find that the uterus is not equal to deliver I can supplement its efforts by the forceps. This is the problem:—Suppose that a woman can deliver herself in twelve hours; the uterus is well aroused, so that no consequences of inertia will occur afterwards; is it better to relieve her at once, or within two or three hours, or to let her go on for the whole twelve hours? Is it any advantage to let her go on in that condition? There is one advantage in primiparæ, that the parts are more slowly dilated, and the head is more slowly moulded; but in a general way, supposing the uterus to be at work, and the pains at the maximum, and an obstacle takes place, if we know that by a little traction we can bring the child out quickly, I must say I think it is beneficial both to the child and the mother, certainly to the child, to abstract it gently and quietly. It is doing no more than you ask the uterus to do, and than the uterus will have to do sooner or later, when it is well roused. But to empty the uterus, or draw out the child—to haul it forth, as Dr. Blundell used to say—when the uterus is not responsive, is one of the most critical things a man can do. Gentlemen often fall into error in this matter. One gentleman told me that he always drew out the child directly he saw any little difficulty in the way. I said, "Do not you have any flooding"? "No," he said, "I do not." It puzzled me to know how he had escaped it. Afterwards he told me that he had had a case of flooding, and it was a lesson to him not to do as he had done before. That was a case of inertia, not a condition where the uterus was in full action. I think, then, we may assent to the fourth proposition of Dr. Barnes. It is almost self-evident that "in

proportion as the head is arrested high in the pelvis, in the brim or above the brim, the necessity, the utility, and the safety of the forceps become less frequent," and, "as a corollary from the preceding propositions, increasing caution in determining on the use of the forceps, and greater skill in carrying out the operation, are called for."

*(To be continued.)*

## BRADFORD MEDICO-CHIRURGICAL SOCIETY.

THE seventeenth annual meeting of this Society was held on June 10th in the board room of the infirmary. The report recorded a large increase in the communications to the Society, in the number and attendance of members, and in the use of the now important library. During the session a museum and pathological room had been added to the infirmary, available to the purposes of members.

Dr. E. T. Tibbits was elected President for the ensuing year, *vice* Dr. Burnie, who retires. Dr. Whalley was re-elected treasurer, with Mr. T. C. Denby to assist, and Dr. Goyder secretary. Drs. Craig, Dunlop, Burnie, and Rabagliati were elected members of committee; Messrs. T. C. Denby and J. Appleyard, M.B., pathologists; and as auditors, Mr. Hirst and Dr. Dunlop.

A vote of condolence with the relatives of the late Mr. W. H. G. Buckley, M.R.C.S., who had been ten years treasurer of the Society, and one of its first members, was unanimously passed.

# Reviews and Notices of Books.

*Children's Lives, and How to Protect them.* A Handbook for ready reference. By WILLIAM LOMAS, M.D., M.R.C.P., Physician to the Seaside Convalescent Hospital, &c. &c. Sampson Low and Co. 1879.—Those who have the care of children owe gratitude to Dr. Lomas for this clear and thoroughly sensible manual. It contains, of course, little that will be new to our readers, although there are some matters of interest even for them; but to others it offers a practical and trustworthy synopsis of the sanitation of childhood. The author has not made the mistake of affecting originality. He starts no theories, and airs no crotchets; but he tells what every mother ought to know, and tells it simply and well. If in some cases he has seemed to touch somewhat upon the province of the medical attendant, it is only because many, even in England, and thousands in the colonies, live so far from medical help that they are at times compelled to act, wisely or unwisely, for themselves. One of the best chapters in the book deals with the treatment of children after recovery from severe disease. The too common custom of hurrying children away to the seaside before they have gained strength to stand the change, and often before they are fairly free from the taint of infection, is wisely reprobated, and the dangers of the lodging-house, enhanced by the frequency of this practice, are pointed out. We heartily concur in the advice which Dr. Lomas offers to the authorities of our national sanatoria, that they should place lodging-houses under systematic inspection, and should more frequently enforce punishment upon persons who are the means of bringing infection into their districts. Few things would do more to ensure the popularity of a watering-place than the knowledge that the danger of infection, now so commonly dreaded, had been reduced to a minimum.

*Transactions of the Clinical Society of London.* Vol. XI. London: Longmans, Green, and Co. 1878.—*Bulletin de la Société Clinique de Paris.* Vol. II. Paris: V. Adrian Delahaye et Cie. 1879.—The appearance of the second volume of the proceedings of the Paris Clinical Society affords an opportunity for contrasting its work with that of its older sister, our own Clinical Society. The amount of work done by each is about the same, but the Parisian Society holds more meetings, and its volume is replete with original and suggestive work—therapeutical as well as pathological. But what is most striking is the comparative deficiency of purely medical subjects in the English volume as contrasted with their redundancy in the French. For, excluding papers on dermatology (of which only three appear in the French volume), we find only seventeen papers on medical subjects in our Society's proceedings, as against thirty-eight in our neighbour's. It is time that our physicians looked to their laurels, and bestirred themselves in the cause of medical science. In justice it should be added that all the communications read at the Paris Society are not records of cases. The majority are, but some few deal with general therapeutical topics, such as the hypodermic injection of morphia in asthma and in dyspnœa; or are theses upon special subjects, as that on bronchial dilatation in tuberculosis, or that on the pathogeny of pneumonia—a clever paper by M. Fernet, in which he endeavours to show that "acute so-called fibrinous pneumonia is a herpes of the lung, and this herpes is a trophic disorder due to a neuritis of the pneumogastric nerve." Most will concur with the President's remark that the facts recorded by the author might be admitted, but not his interpretation of them. Amongst other interesting papers may be cited one by M. Rivet on aneurism of the arch of the aorta treated by electrolysis with marked benefit; one on venous pulsation on the dorsum of the hand in the final stage of certain cases of pulmonary phthisis, by M. Péter, the President; tuberculous ulceration of the palate, by M. Quenu; eruptions due to chloral, by M. Mayor; generalised xanthelasma, by M. Chambard, this last being a subject fairly and thoroughly sifted in England. Of the contents of the English volume there is no need to speak here. Our pages have duly contained the leading features of each of the papers (many of them of high excellence and great practical value) as they were read. But there is one feature of the French volume which does not find its counterpart in the English. In this country we are content to let the journals record the discussions arising out of the papers read before the societies, but in France a full verbatim report of the remarks passed at the meeting finds its place in the published volume. Do they manage these things also better in France? Would its discussions gain in force and thought if our Clinical Society were to imitate its younger rival in this respect?

*Notes for Students: Pathological Anatomy.* A Guide in the Post-mortem Room. Part I.; pp. 29. By ROBERT J. LEE, M.A., M.B. Cantab. London: T. Richards. 1879.—These "notes" are intended to assist students when they commence the study of Morbid Anatomy. The author appears to have attempted too much; it would have been better if he had limited himself to the description of the way a complete post-mortem examination is to be made, the organs examined, and the more usual diseases recognised, without the somewhat meagre explanations he has here and there introduced. We notice several omissions; for instance, he makes no mention of opening the pericardium before examining the heart, of examining the gall-bladder and bile-ducts, or of investigating the intestine for signs and causes of obstruction. Is it not rather misleading to speak of the lung in red hepatisation as "firm," and in grey hepatisation as "not quite so firm, more moist"? No instructions are given in the methods of investigating many common surgical affections, as stricture, fractures, aneurisms, diseases of bones, and tumours.

*Pott's Disease, its Pathological and Mechanical Treatment, with Remarks on Rotary Lateral Curvature.* By NEWTON M. SHAFFER, M.D. New York: G. P. Putnam and Sons. 1879.—The special feature of the first part of this essay is the distinctions in seat, cause, and terminations

of the dry and the suppurative forms of caries of the spine, or chronic spondylitis, as the author calls it. While agreeing with Dr. Sayre in some of the principles of treatment, he strongly advocates the use of a modification of Taylor's support instead of the plaster jacket. It consists of a pelvic band to which are riveted two uprights of malleable steel, which are placed along the lines of the transverse processes, and are carefully moulded to the deformity; they are fastened by straps round the chest and over the shoulders, and by a zone of plaster-of-Paris round the loins and lower chest. The apparatus is applied while the patient is recumbent, extension and counter-extension being maintained by assistants at the axillæ and thighs. It is affirmed that this is a cleaner, lighter, more easily applied, and more efficient mode of treatment than Sayre's.

*Notes on the Care of the Sick, and Practical Advice to those in Charge of the Dying and the Dead.* By ARTHUR BRINCKMAN, Chaplain St. Agnes Hospital (late H.M.'s 94th Regt.) London: G. J. Palmer. 1879.—We can, with all sincerity, recommend this little book as the result of the experiences of a man who has learnt to see and observe in a liberal and systematic manner, to take note of things that are generally known but by no means generally promulgated. In point of fact, he tells us how, in connexion with the treatment, the care and visiting of the sick, to do little things well, by reminding his readers forcibly but pleasantly, of many small matters in the conduct of persons at the bedside that go to make up much comfort or discomfort for the patient. The author has had practical work in connexion with the sick at home and abroad, and he has acquired the kind of liberality in dealing with his subject possessed by comparatively few of his own profession.

*Atlas of Skin Diseases.* By LOUIS H. DUHRING, M.D., Professor of Skin Diseases in the Hospital of the University of Pennsylvania, &c. Philadelphia: J. B. Lippincott and Co. 1879.—We have received Part V. of this excellent atlas, containing plates representing hands and forearms affected with scabies, herpes intercostalis, and tinea sycosis, a disease more common in America than England; and eczema vesiculosum of the arm and side of the chest. Dr. Duhring is taking an immense amount of trouble with the issue of these plates, and they all reach a very high standard, whilst the letterpress is all that can be desired.

## HEALTH OF LARGE ENGLISH TOWNS

### IN THE TWENTY-SEVENTH WEEK OF 1879.

DURING last week 4932 births and 2531 deaths were registered in twenty of the largest English towns. The births were 250, and the deaths so many as 839, below the average weekly numbers during 1878. The deaths showed a further decline of 63 from the declining numbers in recent weeks. The annual rate of mortality per 1000 persons living, which had steadily declined in the sixteen preceding weeks from 29·1 to 18·3, further fell last week to 17·9, the lowest recorded death-rate in any week in these towns. The lowest rates in these towns last week were—9·5 in Portsmouth, 13·7 in Leicester, 13·9 in Hull, 15·1 in Nottingham, and 15·3 in Brighton. The rates in the other towns ranged upwards to 19·9 in Bradford, 21·2 in Liverpool, 22·0 in Norwich, 22·1 in Manchester, and 27·0 in Newcastle-upon-Tyne. The deaths referred to the seven principal zymotic diseases in the twenty towns were 359 last week, against 375 and 399 in the two previous weeks; they included 104 from measles, 84 from scarlet fever, 69 from whooping-cough, and 30 from fever, principally enteric. The annual death-rate from these seven diseases averaged 2·5 per 1000 in the twenty towns last week; it was 0·0 and 0·8 in Brighton and Portsmouth, and ranged upwards to 3·9 in Manchester, and 4·6 in Newcastle-upon-Tyne. Of the 104 fatal cases of measles in the twenty towns, 79 occurred in London, and only 25 in the nineteen large provincial towns; the disease was somewhat prevalent in Bradford. Scarlet fever showed the largest proportional fatality in Newcastle-upon-Tyne and Oldham; and whooping-cough in Manchester and Bristol. Diphtheria caused 3 deaths in Plymouth; and small-pox 11 in London, but not one in any of the large provincial towns. The recent cold and wet weather has resulted in an unusually low death-rate from diarrhœa; only 42 deaths were referred to this disease in the twenty towns last week, against 188, 155, and 289 in the corresponding week of the three years 1876–7–8. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had slowly declined from 207 to 195 in the four preceding weeks, further fell to 190 on Saturday last; only 28 new cases of small-pox were admitted to these hospitals during last week, a smaller number than in any week since the end of October last.

## INSTALLATION OF ST. KATHERINE'S NURSES AT UNIVERSITY COLLEGE HOSPITAL.

ON Tuesday, the 8th inst., a large company of ladies and gentlemen assembled in the library of University College to witness the presentation of the badges and warrants to the new nurses who have been chosen by the committee of the hospital to receive this honour from the Sovereign.

The Duke of Westminster occupied the chair, and stated that he was there to show his gratitude to one of the nurses of the institution, who had so skilfully and tenderly waited upon the late Duchess of Sutherland during her last illness. He rejoiced to see this recognition of the value of the art of nursing, which had improved to such a wonderful extent during the last few years. He stated that the two nurses who were to be decorated that day had been chosen by the committee of the hospital after consultation with the sister superior, and that they were the two oldest nurses still working at the hospital. He read a list of the names of several superannuated and active nurses whose merit demanded mention at such a time. Nurses Elizabeth Church (the senior surgical nurse) and Ellen Harrington (the senior medical nurse) were then presented by the sister superior to Lady Jenner, who pinned the badges of the order on to their left arms.

Sir Rutherford Alcock proposed a resolution thanking Her Majesty for this recognition of the value of trained nursing. He thought the Queen had by this act rendered a great service to the general public. Mr. Erichsen seconded the resolution in an eloquent speech. He considered that nursing was now raised almost to a profession. He rendered emphatic testimony to the marked improvement in nursing that had taken place during the last twenty years. Nurses were now a physician's skilled assistants. But the public little understood the cost at which the nurses do their work—it was at the expense of life, health, and premature decay; the mortality among them was 40 per cent. higher than among other women, and as many as 50 per cent. died of infectious diseases. Mr. Marney supported the resolution, which was carried by acclamation.

Mr. Marshall proposed a vote of thanks to Lady Jenner for the very graceful manner in which she had discharged her duty, and pointed out the special fitness of her being selected to do it. In the absence of Sir W. Jenner, Dr. Russell Reynolds responded for Lady Jenner, and said that while the nurse of the past needed no description, the nurse of the present was above it; she was an intellectual automaton, directing her work by sympathetic appreciation of the patient's wants.

Mr. Enfield, treasurer of the hospital, proposed a vote of thanks to the chairman, which was seconded by the Master of St. Katherine's Hospital, carried, and briefly responded to by the Duke of Westminster.

The secretary of the hospital read the regulations for the order, which differed materially from those sent to the authorities at the Westminster Hospital, for a sum of £50 a year for three years, was granted to the hospital for each nurse, instead of to the Nursing Institution.

# THE LANCET.

*LONDON: SATURDAY, JULY 12, 1879.*


IT is to be hoped that the Select Committee will have no difficulty in seeing clearly the nature of the questions which are raised by the Medical Bills now before it, and that henceforth there will be no misapprehension of the objects of those who desiderate a real reform in our examining system, and of the central body which is supposed to control it. Of course a reform that is worth anything cannot be made pleasant all round. A reform has never yet in history been allowed to be necessary by the bodies concerned. The medical authorities in Schedule A are no exception to the rule that corporations have a good conceit of themselves, and think they do their work admirably. But their self-complacency is nothing compared with that of the General Medical Council. Few bodies have had so many opportunities of seeing their own faults, and of getting these faults quietly amended. The Government gave the Council an opportunity of suggesting moderate changes, but all to no purpose. They procrastinated and shilly-shallied till nothing was left for the Government but to refer the question to a Select Committee. Only after the decision of the Government was announced the Executive Council produced a report, which two of the Executive Committee declined to sign, to the effect that "no alteration in the present constitution of the Council is necessary"—a convincing conclusion by a corporation made up of corporations!

The first few witnesses before the Committee—the President and members of the Council—repeated the kind of evidence with which the Government has always been regaled whenever it sought information as to the doings and the constitution of the Medical Council. The doings of it were most laudable: it had produced a Register; it had created a British Pharmacopœia; it had given its attention both to preliminary and medical education. The constitution was equally satisfactory. If the duties of the Council were to remain as fixed by the Act of 1858, nothing better can be devised than the Council of that Act—a truly happy family sinking all delicate questions, and passing amiable resolutions in the form of recommendations, to be regarded or unnoticed at the sweet will of the individual bodies. As for those who sought to change so perfect a body, they had inferior motives; they wanted to make the Council a medical "parliament"—to make it a trades union to secure higher fees to practitioners and higher salaries to Poor-law officers. Even Mr. SIMON, who is not blind to the faults in the working and the constitution of the present Council—and whose statesmanlike mind must often be sorely vexed at the Council table, and who withal is a fair man,—gave the weight of his testimony to this kind of representation. It was justifiable in Dr. GLOVER to bring Mr. SIMON of 1868 into the discussion as against Mr. SIMON of 1879.

After the evidence of Dr. WATERS and Dr. GLOVER, if not before, such representations must be regarded as misrepresentations. In a body of ten thousand persons—the number by which memorials for reform have been signed—there would be, of course, some with lower views of the duties of a Medical Council. But the evidence of Dr. WATERS and Dr. GLOVER singularly coincided in disavowing any wish to see the Council championise the "interests" of the profession. Those were matters for the voluntary associations of the profession, and for its corporations—if they really have that sympathy with their members of which they speak so much and show so little; but they are not duties contemplated in the Act of 1858, and there is an utter absence of ground for saying that any responsible persons wish to impose such duties in any new Act. Dr. GLOVER, indeed, said distinctly that, in his judgment, the Council, as the guardian of the Register, having received in that capacity from the profession £137,000, ought to have given much more attention to perfecting the Register; and not only so, but that it should have shown a disposition, in glaring cases, to prosecute those who falsely pretended to be on the Register, or who, being on, abused their registration in an unworthy or fraudulent way. And this is all that Dr. LUSH'S Bill contemplates or that any body of reformers wish. Dr. WATERS and Dr. GLOVER were quite agreed in grounding their demands for an alteration in the Council on its great failure as "the Council of Medical Education." Dr. GLOVER showed that, while it was always adding to the severity of examinations, it was doing very little for improving medical education. The rejections, according to to Dr. AQUILLA SMITH, at the *final* examinations had gone up from 12·4 per cent. in 1861 to 23·2 per cent. in 1875. Dr. GLOVER said he had analysed the returns with respect to the *first* professional examinations in the years 1867 and 1877 respectively, and found that the rejections had gone up from 24 to nearly 37 per cent. It is cruel towards the student to increase the stringency of examinations without perfecting the process of education. True the student must rely chiefly on himself. But there are some things that the Council can do, which it has not done. For the last ten or fifteen years, according to Dr. GLOVER'S evidence, it has been having long and costly discussions, which have ended in impotent recommendations. It has had many committees of education, composed of men of the greatest eminence. But the changes they recommend are not carried out, and at intervals of five or ten years the same points are raised again. The Council sometimes even forgets the recommendations of its own committees, and seems little affected by the fact that the bodies do not act on them. The most damaging thing about the Council, as showing the rottenness of its constitution, is that, after all its failures, it has no wish for more power to influence the work of education more effectually. After all its failures, it has a fine idea of its performances. The blindness is judicial, and affects no one outside the Council or the charmed circle of the corporations.

We must notice one point at the close of Dr. WATERS'S evidence. Mr. PLUNKET seems possessed with a fear that any reform would add to the onerousness of the duties of the Medical Council, and that eminent men might be unable to continue their services. No doubt this would be a great calamity; but Dr. WATERS very powerfully suggested that really eminent men are most alive to what they owe to their profession, and will not begrudge a few hours

in its service once a year. The profession will never lack men to serve it in such honourable, though not honorary, posts. Besides which, the reforms now proposed will greatly economise the time of the Council, by giving it real power to enforce its decisions, and thus obviate the necessity for those reiterated discussions which so discredit it.

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IT is one of the weaknesses of human nature that the intellect can seldom take cognisance, or even retain a firm and clear mental grasp, of more than a single phase of any subject at once. And by long dwelling on a particular line or aspect of observations, the mind becomes so imbued with its special characteristics that it ceases to be able to adapt the range and mode of thought to any other. This twofold imperfection—the lack of power to take a broad view, including the reverse as well as the obverse of a subject, coupled with a tendency to mannerism, amounting almost to finality of method—constitutes a serious hindrance to the pursuit and conception of *truth*. For example, seeing only the physio-chemical and crudely "vital" side of nature, men engrossed in the investigations of medical science too often not only ignore, but by an exclusive process of reasoning deny, the existence of anything outside the field of their philosophic vision. It is nothing to the Rationalist that the Idealist is not less confident in the sufficiency of his philosophy, than he is in the compass of his own. Nor is the rigid Realist and Evolutionary Materialist prepared to concede as much to the thinkers of other schools, as COMTE conceded when he recognised that the intellectual needs of human nature craved a belief outside Positivism.

There is an affectation of scientific principle in the determination to admit nothing which cannot be proved, to reject every form of evidence except the specifically demonstrative, which gratifies the vanity of the philosopher, and so cheats his senses that he seems to stand alone on a firm footing, while all around him glide. What if fixity, even the sort of permanence which appears to be an attribute of *principle*, is incompatible with science? Supposing it should hereafter be found—as some think the past has shown—that truth is progressive, that the horizon stretches away as we approach it, that the "impossible," and things that "cannot exist" of yesterday, become the ascertained facts, the postulates of to-day? What if the very method of our inquiry be at fault, and the powers we bring to bear upon the task of investigation are only part of the means at our disposal; if we persist in looking at the objects around us with one eye, when we have been provided with two? Supposing man is not wholly physical or material, and it is because he refuses to use the spiritual powers at his disposal he fails to perceive what lies beyond the reach of his senses. Men of highly cultivated intellects have, in times past, believed in the existence of a soul, and there have been minds, not fatally tainted with disease, which have cherished faith by the side of reason, without finding the two forms of energy mutually destructive. Some, who have done good work in science, have even gone so far as to deem the proofs of a spiritual element in man's nature as many and conclusive as those which attest the existence of his organism; the belief in a God as permissible as the belief in a protoplast, and the recognition of a spiritual entity as reasonable as the cognisance of matter.

If proof were needed that this is the true *scientific* position in respect to these subjects, it would be found in the fact that a strong and real difference of opinion exists as to their nature and claims on our attention. The strife between rival creeds and faiths may not convince the philosopher that any one of the number is *the* true faith to the exclusion of others; but it does show that faith is a normal form of mental energy. The larger part of mankind would not exhibit faith, religion would not be found to become increasingly spiritual with the growth of intellect in the development of races and peoples, and man as an animal would not be gifted with faculties, a mind, and aspirations, connecting his hopes and fears, his motives and impulses, with another life and another world, if there were no other life or state of existence to call forth these qualities. It is a fundamental law of Realism and evolutionary Materialism that the developmental impulse springs from the surroundings. If these require the development of a particular organ or faculty, it grows in obedience to the need of circumstances, which acts as a stimulus. This law applies to the development of faith in man, and to the growth of his spiritual nature, not less than to the parts of his organism. If there were no object to inspire and attract faith, that form of mental energy would not exist. If there were no future, there would be no hope therein. We will go farther still, and affirm that the very antagonism of cultivated minds to the doctrine of spiritual entities and forces is a strong corroborative proof of its verity. The mind only attacks with vigour what it instinctively feels to be a strong enemy. When a thinker of known ability persistently and laboriously strives to demolish the belief in a personal God, in his inner consciousness he feels the force of the evidence that such a Being exists. It is this stimulus of conviction—a conviction he is ever seeking to efface—that incites him to efforts wholly disproportioned to the needs of an onslaught on a belief known and felt to be utterly groundless. When a man describes prayer as "imbecility of the will," he himself prays. When he incessantly quotes Scripture to pour ridicule on the faith of the majority, this is, in itself, evidence that he has not the power to shake off its influence or to uproot the faith he derides.

The time has come to speak out boldly on this subject, and we are persuaded the good sense and self-respect of the profession will approve the protest against that spirit of restless antagonism to the claims of Religion, which has unhappily obtained fuller expression in a small section of our ranks during the last few years, and which, if not repudiated, must be expected to increase. The position we assume in reference to this matter is one which may be easily defined. We are not the apologists of any special creed, but we say Faith is a rational and natural form of mental activity. The religious instinct is an essential part of man's nature. There is a distinctly spiritual side to his character. The existence of hopes, fears, and aspirations—call them *susceptibilities* only, if anyone prefers the term—is in itself evidence that there are spiritual surroundings and subjects of thought which call these forms of energy into existence. It is scientifically possible that not one of the forms of belief extant may be true to fact, and yet the existence of faith proves conclusively that there is subject for *faith*.

It is not philosophic to affirm that nothing exists, or

can exist, beyond the scope of our observation. It is not rational to believe that man has been imbued, as we find him imbued, with a longing for *personal* immortality, without the existence of a future state which has called forth, and will hereafter justify, his aspirations. Nor is it scientific in a practical sense to consider the intellectual development of human nature complete without the manifestation of a religious element in the character. He is not of sound mind who has no cognisance of the spiritual part of his own nature. We make this assertion without hesitation and in full view of the puerile remark it may provoke. We deny that faith is a pure figment of the imagination, and that the religious emotions are simply visceral in their origin and nature. We take our stand on the broad basis of *fact*, and find faith, religion, and a spiritual phase of the human intellect falling within the compass of the mind. Moreover, we find the moral character largely influenced by the motives and impulses that spring from without. In the face of these evidences we cannot but recognise the value and importance of earnest views of life and the future. It is, therefore, with sincere satisfaction we observe the effect which has been produced by the posthumous confession of a simple Christian faith promulgated in these columns at the request of the late TILBURY FOX. We venture to hope it is only the formal expression of belief which has constituted the notable feature of this case. The faith exceptionally expressed is, we are glad to believe, widely cherished. There would seem to have been a feeling prevalent in the medical profession of late years that men of our cloth should avoid the avowal of their personal sentiments on religious subjects. We agree that the physician should not usurp the functions of the minister of religion, but he is forbidden by the spirit of manliness to take refuge in the opposite extreme of moral cowardice with a pretence of indifference. Men engaged in the ministry of medicine in the chamber of sickness and by the bed of the dying must needs have solemn experiences, and there is doubtless a tendency to arm the sensitive nature and conscience against the pathetic appeal of scenes in which we are professionally engaged. Against this leaning towards an assumed and artificial state of apathy it is necessary to guard. The dying confession of our friend and colleague may help some to take up a better and healthier position in regard to subjects of the highest and most enduring concern. The use made of the incident to which we have alluded by clergymen and ministers of every denomination is to be commended, albeit some of the remarks offered have been marred by sneers at the medical profession, which we feel to be undeserved, and therefore discreditable. In another column we instance the observations of the Rev. T. S. COLES, of Chobham, who has judiciously noticed the subject. It remains to hope that others will find in the few telling sentences left on record by Dr. FOX an occasion for equally wise and generous comment. For ourselves, and the profession as a body, we claim to be considered as having neither part nor interest in the speculations of men who mistake a spirit of sententious scepticism for scientific zeal and acumen; and who, by the restless energy of their enterprise against Religion, and their unwearied anxiety to deprive man of his hope, beyond the present, are unwilling witnesses to the Truth they assail—the unconscious contributors of a living testimony to the Faith they despise. Such short-sighted labourers in the field of science, blind to all that lies around and outside the circle of a narrow vision, may be good and true workers within the limits of their enterprise, but they err egregiously in closing their eyes to everything beyond.

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THE breaking-up of the combined sanitary district of Chelmsford, Maldon, and Billericay, Essex, and the retirement in consequence of this disruption of Dr. CORNELIUS FOX, who held the appointment of medical officer of health to the combined district, from the public health service, are events of which it is unnecessary to insist upon their gravity with reference to the future of the sanitary administration of the kingdom. When the Local Government Board first set itself to encourage the formation of combinations of sanitary districts which should have a medical officer of health in common, it urged upon sanitary authorities as reasons for combining for this purpose the consideration that, while it would conduce to economy of expenditure by the individual authorities, it would enable them, acting together, to offer a salary which might tempt men of high standing to accept the post and to devote their whole time to its duties. The argument scarcely admitted of question, and although, for various reasons, it did not influence sanitary authorities to so great an extent as was to be desired, it influenced them sufficiently to afford an abundant proof of its soundness. Among the several men of high standing in the profession, with proclivities to sanitary work, who were tempted to resign the practice of their profession, and accept appointments as medical officers of health to combinations of sanitary districts formed at the instigation, and with the approval, of the Local Government Board, a foremost place was occupied by Dr. CORNELIUS FOX. His previous studies and experience had qualified him in an eminent degree for performing the duties of a medical officer of health, and it was felt that the acceptance of the post by a gentleman of his standing, and by others of like qualifications, gave a surety for the future of efficient local sanitary administration in England which could not otherwise have been secured. If at any time doubts may have possessed the gentlemen accepting posts of the sort in question of the stability of their appointments—doubts suggested by the somewhat complicated legal provisions under which (as appeared to the uninitiated) they were made,—it does not seem to have occurred to any one of them that the Local Government Board had not both the power and the will to prevent harm unjustly befalling the medical officer of health from the modifications of combinations of districts for which the Board was primarily responsible, and which represented an important part of its administrative policy, unless these modifications were dictated by some imperative necessity. The profession has now to learn otherwise. It has to learn indeed that the combinations of sanitary districts formed for the appointment of a medical officer of health in common exist only so long as the several authorities concerned in them, or any one of them, elect to continue in combination; that they may be broken up on the most frivolous pretexts; that the medical officer of health who has been induced to accept service with them may be left stranded, without practice, and without immediate prospect of livelihood; and

that the Local Government Board professes itself helpless in the matter, except to admonish, as it were, after the fact. For this Board, affecting presumably a strictly legal view of the case, says in effect to the stranded medical officer of health, the mischief being done, If you think fit to enter into arrangements without consulting your solicitor, and through him even counsel, as to the nature of those arrangements, the consequences be on your own head. It is grievous to the Board to behold a spirit of medical adventure, as it were, imported into appointments approved by the Board, and thus discrediting them. True, the policy of these combined districts is ours. But it is a policy which we must obviously carry out as interpreted by the acutest lawyers, backed by the acutest counsel, and it would appear that the breaking up of a combination, and the stranding of the medical officer of health thereof, is a normal (if disagreeable) phenomenon as the law now stands. True, also, we have not always taken this view of the law, and that more than once we have compulsorily prevented the disruption of combinations under circumstances similar to those which have cast Dr. FOX afloat. But the law does not provide for the consistency of Government Departments, and we must abide by the law.

Something of this sort has been slowly forcing itself on the attention of the profession of late in the unsettlement and even disruption of several of these sanitary combinations. Last week we had occasion to refer to the break-up of a combination in Devonshire; but it required a disruption such as that which has occurred in Essex, and which has lost to the public health service Dr. CORNELIUS FOX, to bring fully to light the grave evil which is befalling our local sanitary administration. The facts in the Essex case may be stated in a few words. Dr. FOX two or three years ago gave offence to one of the three sanitary authorities, in the combination of which he was medical officer of health. A report upon the defective sanitary state of a village in the authority's district, which led to a Government inquiry, conducted by Dr. THORNE THORNE, of the Local Government Board, appears to have been the cause of offence, and was not the less resented because the results of Dr. THORNE'S inquiry confirmed Dr. FOX'S report. The resentment was subsequently revived by a report of Dr. FOX'S on an outbreak of diphtheria in the same village. The period of Dr. FOX'S engagement with the authority terminating in June, the authority took the opportunity of withdrawing from the combination, and thus docking Dr. FOX of over a fourth of his salary. The Local Government Board professed itself helpless in the matter, and as Dr. FOX could not hold the appointment of the two other authorities in the combination on these terms, he has retired altogether from the public health service. The step is dignified, but the example is awkward. The public health service cannot afford to lose men of this kind, and the Local Government Board would do well to look a little further into the future of local sanitary administration than it appears to be doing. It is difficult to conceive how a great Government department can have lent itself to a policy of administration which may have among its consequences results such as those which have befallen the Chelmsford, Maldon, and Billericay combination of sanitary districts and Dr. CORNELIUS FOX. It is to be presumed that the law relating to the subject is insufficient. But is it to be tolerated that a Government Department shall endeavour to carry out an administrative policy for which the law makes no sufficient provision, and, that policy leading, as in the instance under consideration, to evil results, shall seek to shelter itself from responsibility under the strict letter of the law? This is a question which it is especially important at the present time and in the near future for the profession not to ignore.

# Annotations.

"Ne quid nimis."

## ENGLISH PRACTITIONERS AND INVALIDS RESIDENT ABROAD.

NOW that the question of medical reform is occupying the attention of the medical profession, the Medical Council, and Parliament, it is well to direct attention to one branch of the subject which, judging from the reported speeches of some members of the Medical Council, appears to be but little understood. We refer to the question of English medical men practising abroad amongst their own countrymen.

When it is remembered that thousands of English invalids go abroad each year in quest of health, and that the great majority of these speak and understand no other language but their own, it might be supposed that the privilege would be freely granted to them of being attended by medical men of their own country and speaking their own language, and this on grounds of common feeling and humanity, if not on account of the material benefits which always accompany the presence of Englishmen in any numbers in a foreign health-resort. So far is this from being the case, however, that in most countries great, most vexatious, and increasing difficulties are placed in the way of English medical men acquiring the right to practise abroad amongst their own people; this we will shortly proceed to show.

The motive for this illiberal behaviour there is no difficulty in divining, but the exclusiveness is attempted to be defended on the ground of the necessity of guarding against unfit and unqualified persons being allowed to practise abroad, as though it would not be the easiest thing in the world to ascertain whether any foreigner so practising were possessed or not of proper medical qualifications. So far as English, Scotch, and Irish medical diplomas are concerned, there is scarcely one which may not be fairly regarded as an ample guarantee of fitness to pursue the profession of medicine in any part of the world; and yet to what must the holder of any of these qualifications submit if he desire to practise amongst his own countrymen in almost every one of the continental states.

Take France for example. The application for permission to practise there, even when made in the most authoritative manner—namely, through our ambassador—is almost invariably refused, it having in every case to be submitted to a medical board. In order to obtain the right to practise in France, no matter how high or how various the applicant's degrees may be, or how great his reputation, he must submit to pass the examination for "Officier de Santé," the lowest of French medical qualifications. The examination is conducted in French, and when passed it only confers the right to practise in a particular or limited district or department; and should the holder of it desire to quit one town and practise in another department he is required again to undergo the same humiliating ordeal. So much for French liberality in matters medical.

In Belgium the applicant fares even worse. Applications have frequently been made by English physicians possessing

the highest diplomas and testimonials and desirous of practising at Brussels, Bruges, Spa, &c. These requests have been submitted to a board of examiners, who, after having kept the applicant waiting for months, have invariably found some pretext for preventing him from obtaining the necessary permission; and our countrymen in Brussels, as well as other important Belgian towns, have been for years, and still are, deprived of the privilege of being attended by English medical men.

In Germany, according to the law of the country, any native may practise medicine without any qualification. Whether this law extends to foreigners is not clear; but, however this may be, no person, native or foreign, may style himself "arzt," or medical man, although he may put "Doctor" before his name, as this title does not necessarily imply the possession of medical qualifications. A British practitioner, therefore, even if allowed to avail himself of the general law of the country, will no more be recognised as a medical man than the butcher or the baker, and the only way in which he can obtain a full and legal recognition is by passing examinations in the German language and obtaining German diplomas—a task in most cases utterly beyond the powers of ordinary applicants, many of these being more or less advanced in life, and others themselves broken down in health.

In Austria the difficulties are equally insurmountable. It is necessary that the applicant should undergo the full course of study, and pass in the German language the usual examinations at one or other of the Austrian universities, in addition to which he is often required to become a citizen of the town in which he desires to practise. The result is that the number of English medical men practising in that country and in Germany may be almost counted on the fingers.

In Switzerland, in some few cases, a local permission to practise is granted; but this is not satisfactory, since one is entirely at the mercy of the authorities, and after having secured a tolerable practice one may receive notice to quit at any moment.

The above is only a very brief outline of a few of the difficulties in the way of the English medical man who desires to practise among his countrymen abroad. The subject is a very important one, alike to the profession and the public, and we have deemed it our duty to give to it special prominence in view of the medical legislation now impending. We should like to see a committee of the Medical Council appointed to investigate the subject, with a view to ascertain all the facts connected therewith. It is desirable also that the Parliamentary Committee now sitting should take evidence bearing upon the question. Contrast for a moment the restrictions to which we have referred with the almost complete freedom accorded to foreign medical men in this country, who are not only allowed to practise among their own countrymen here but amongst the English population, a privilege never accorded to the Englishman under like circumstances. We must not forget to mention, to the honour of Italy, that English medical men in that country are treated in a much more liberal spirit; they are usually not interfered with in any way, the utmost required being the registration of their diplomas, and, after a time, the payment of income-tax.

## M.D. MANCHESTER.

THE authorities of Owens College have been quite successful in their attempt to persuade the Government to grant to them a charter to confer degrees in arts, science, laws, and medicine, and a new university for the North of England is, according to the statement of the Lord President of the Council, on the point of being created. We have more than once urged several objections to the scheme, and have pointed out most forcibly the injurious effect on the medical profession that any increase in the number of bodies empowered to grant degrees in medicine or to give licences to practise must necessarily exert. These objections are recapitulated by the authorities of the Liverpool School of Medicine in a petition to the Privy Council, which is now before us, and which we hope will have serious consideration before the terms of the charter are finally settled. Another medical licensing body is an unmixed evil, and there is no reason whatever why the Manchester School of Medicine should grant degrees in medicine any more than many other medical schools in the kingdom. The teaching at Manchester, to judge from the number of the medical students and the results of the examinations of which the statistics are published, is in no degree superior to that at most other provincial and metropolitan schools, and, as a logical outcome, Birmingham, Liverpool, and the larger metropolitan schools have an equal right to demand the power of conferring degrees on their students. Surely the Medical Council, which is on the eve of meeting, will take the earliest possible opportunity of discussing this question, and of stating its views thereon to the Government; otherwise a twentieth licensing body will be established merely because, through mere supineness, no opposition has been offered, although the interests and general feeling of the profession are quite opposed to its formation. The Lord Chancellor, in his speech on the Irish University Bill, which merely enlarges the scope of the present Queen's University, and introduces no new degree-granting body, rightly said that a degree is a mark of honour given by the Crown. The multiplication of degrees at the request of ambitious Colleges tends in every way to minimise their value. As soon as Owens College secures the privilege of conferring them, other teaching institutions, with claims quite as good, will be clamorous for a similar distinction, and, in medicine especially, this is, from every point of view, to be deprecated.

## THE MIDDLESEX HOSPITAL.

THE vacancies on the staff of this hospital, caused by the resignations of Dr. Thompson and Mr. Nunn, were filled up on Monday last at a meeting of the Election Committee, when Dr. Robert King was elected physician, and Mr. Henry Morris surgeon to the hospital. At the same time Dr. D. W. Finlay was elected assistant-physician, and Mr. R. W. Lyell assistant-surgeon. Dr. Finlay has held the office of Medical Registrar for the past three years, having previously to that filled resident appointments at the hospital. Mr. Lyell has been surgical registrar for upwards of four years, and is also medical tutor to the school.

As these are the first elections held under the new scheme adopted with the praiseworthy desire of abolishing the necessity of a canvass on the part of candidates, it may be of interest to know in what the Election Committee consists. This committee was formed at the last Quarterly Court of Governors, pursuant to a resolution carried at the court in November last. It is an annual body, and is formed of twenty-six members—viz., the treasurers, three members of the honorary medical staff and three members of the honorary surgical staff, six members of the Weekly Board, and twelve governors not being members of the Weekly Board or of the medical or surgical staff, elected by ballot annually at the Quarterly Court in May. In this committee is vested the power of election to the honorary medical and surgical staff, at a certain period after the declaration of vacancies, whilst all canvassing by candidates, directly or indirectly, renders them ineligible for election. Hitherto the choice of candidates has lain with the whole body of governors of the hospital, and we commend the abnegation of their rights in this respect to the attention of other bodies amongst which this inconvenient custom still obtains. The

abolition of the system of general canvassing, so obnoxious and demoralising, as well as vicious in its results, is a boon the value of which cannot be too highly estimated by candidates.

## THE CHOLERA IN INDIA AND AFGHANISTAN.

THE mail this week has brought us further details of the cholera, which has now for some weeks been so prevalent in nearly all parts of the Punjab, and has so severely stricken our troops returning from Afghanistan *vid* the Khyber Pass. It may be interesting to go back a few weeks and note the progress of the disease from its appearance to the date of our correspondent's letters. Early in May cases had occurred at Peshawur, and, although confined chiefly to natives, past experience justified an apprehension of a severe outbreak in the city and neighbourhood later on in the hot weather. Cases were also reported at Ali Musjid and Jumrood. The gloomy anticipations have unfortunately been fulfilled. During May the disease was rife in the city of Peshawur, as many as fifty fatal cases (natives) occurring in a day, while most of the stations held by the Peshawur Valley Field Force between Jumrood and Gundamak were visited by cholera, and reported fatal cases. At the end of the month there was a lull in the disease at Peshawur, and, with the exception of Lundi Kotal and camps adjacent, it seemed on the decline in this part of India. Strong political and military reasons rendered the evacuation of Jellalabad, and that portion of Yakoob Khan's territory held by us beyond Lundi Kotal—now our frontier station,—absolutely necessary, and the medical authorities, while recognising the danger of moving troops at this time of the year, and through districts which had so recently been visited by cholera, did not shrink from the responsibility, but at once took all precautions, founded on experience and sanitary knowledge, to minimise the danger, and preserve the health of the men on their way back to India. On the recommendation of Surgeon-General Ker Innes, C.B., Surgeon-Major J. H. Porter was appointed to the Quarter-master-General's staff as Sanitary Field Inspector, his duties being to select camp grounds and make all necessary sanitary and hygienic arrangements on the line of march. Briefly, these have been as follows:—Long marches to be divided, and tents erected at suitable camps, where good water was obtainable, the men thereby avoiding the delay and fatigue of waiting for and pitching their own tents; when practicable, the march to take place in the evening, or by moonlight; tea and coffee to be provided before starting, a "coffee shop" half way and breakfast to be ready shortly after arrival in camp; the rum ration to be divided into two portions, one invariably to be issued with dinner; the regular sick carriage to be augmented by extra doolies, mules, and camels; a section of the Field Hospital, complete with equipment and medical comforts, to accompany each division; two days' interval to elapse between each party, to prevent a block on the road, and to allow time for the thorough cleansing of camp grounds; standing rest depôts to be formed at selected places, tents roofed with thatch, if possible, to be erected for the reception of serious cases deemed unfit to proceed; small isolated cholera camps to be pitched; strict attention to be paid to the water-supply and conservancy; coloured flags to mark out the position of latrines, urinals, and offal trenches; troops to be prohibited from occupying the mud forts and buildings, most of them having been used by natives suffering from cholera; from Dakka, detachments to proceed down the Cabul river on rafts, avoiding the hot Khyber and the Peshawur valley (it was uncertain whether this latter arrangement could be carried out); cholera hospitals for native troops and followers to be established at Dakka, Ali Musjid, and Jumrood; on arrival at Peshawur all serious cases to be transferred to the base hospital, for, although Peshawur at this season is considered very unhealthy, the risk to health is less than conveying men seriously ill still further down the burning plains of India; they will enjoy the comforts of a well-ordered hospital, with ice and other luxuries, to which under canvas they have long been strangers; convalescents and slighter cases to proceed to the depôts at Murree and Cherat. In spite of these precautions the troops have, we hear, suffered severely on their return to India. At Safed Sung (Gundamak) the heat on the 31st May is described as very trying, 97° in a well protected tent, and on descending to the plains a much higher rate of temperature was to be looked for. The first division, consisting of the I. C. battery R.H.A. and the 10th Hussars, left Gundamak on the 1st June, the 4th Battalion Rifle Brigade on the 3rd, the 51st Light Infantry, with E-3 R.A., 1-17th Regiment, with 13-9th R.A., following on the 5th and 7th respectively. The first party were attacked with cholera at Fort Balley, near Jellalabad, the 10th Hussars losing seventeen men, the Artillery and the Rifle Brigade also having several fatal cases. Our correspondent's interesting account closes here; we hope, however, to be furnished with particulars of the return march to Peshawur by an early mail, and to find that Sir Samuel Browne's gallant Division has reached its destination without much further loss.

## SMALL-POX IN THE OUT-PATIENTS' ROOM OF HOSPITALS.

AN incident occurred at King's College Hospital a few days ago which is probably neither novel nor peculiar to that hospital, but which we would hope in its subsequent development could not be paralleled in any other metropolitan general hospital. A man presented himself in the out-patients' room of the hospital suffering from small-pox. The disease was so manifest that the porter and the registrar (not a medical man) recognised it, and immediately separated the patient from the other patients in the room, summoning at the same time one of the resident medical officers. King's College has not, of course, accommodation for small-pox cases. What, then, was to be done? The patient, it was ascertained, belonged to Clapham, and the hospital officials affirmed, it would appear, that he must be sent to his parish, for if the parochial authorities where the hospital stands were appealed to the hospital would have to pay all costs of removal and maintenance, the patient not belonging to the parish. But how to send the patient to Clapham? The Sanitary Act forbids his removal in a cab or other public vehicle, and the hospital officials seem not to have known of any other mode. The end was that, to the great disgrace of the hospital, *the patient was suffered to leave the hospital, to make his way on foot through the crowded streets of London to Clapham.* We do not pretend to know what the mysteries of parochial law may be in a case like this, but we are not prepared to believe that the local representatives, if appealed to, would not have helped the hospital immediately out of its difficulty, and we are quite sure that the subscribers to King's College Hospital will not admit that the question of cost is a sufficient excuse for turning a small-pox case loose into the streets. But where were the sanitary officials of the district whose duty it was to have come to the relief of the hospital, and with whom the question of expense could scarcely have arisen? Is not their existence known, or that of the medical officer of health at least, to the hospital officials? We are obliged to infer not. But failing even this knowledge, is not the Ambulance Society and its ambulances known in that institution, by the aid of which, and at the cost of a few shillings, the patient could have been transferred to Clapham safely, or, better still, to the nearest metropolitan asylum small-pox

hospital, where he would have been immediately received, and the King's College officials need not have had further distress as to cost of maintenance? What is obvious is that the King's College officials have not taken the commonest precautions to ascertain what is the proper course to pursue in the event of finding infectious diseases in their out-patient rooms, and that it is high time they and other hospitals in like cases should ascertain them, and that printed instructions regarding them should be permanently suspended in the out-patients' rooms for the information of the officials.

## EXPERIMENTS WITH HORSE-POX.

SOME extremely interesting experiments have of late been made by MM. Pingaud, Viseux, and Thomas. These gentlemen, having had the opportunity of witnessing an epidemic of horse-pox during the month of February last, decided to try what would be the effect of inoculating on man the liquid contained in the pustules. Accordingly, M. Pingaud chose a white horse four years of age, who was suffering from horse-pox, but whose previous health had been all that could be desired, as the subject that was to furnish the lymph. The cutaneous eruption was discrete in character, consisting in a few pustules covered over by crusts, and situated about the shoulder. But the mucous membrane of the mouth and the posterior surface of the upper lip were covered with a number of pustules with the characteristic pearly look about them. The serous fluid contained in these pustules was carefully collected, and seven young soldiers were inoculated with it. These men had never been vaccinated. Six days after the operation six of them presented small pustules, the basis of each showing very slight signs of inflammation. Four of the six successful cases were made use of to inoculate sixty-four other men, eight of whom had never been vaccinated, with the result of obtaining forty characteristic pustules—in other words, 64 per cent. were attended with success. No inflammatory accidents were met with in any of the cases, and in a few only the pustules exhibited a furunculous aspect. Several calves were also inoculated with the horse-pox, and were made use of for secondary vaccination, but in these instances the proportion of successes fell from 64 per cent. to 48. The activity of the lymph had consequently been diminished by passing through the calves. In several instances cited by Tenner, Zoy, and Amyot, of Alfort, inoculation with horse-pox was followed by more or less serious accidents. M. Pingaud, however, thinks that this result was due to the manner in which they were done. He is careful in taking only the pearly liquid which is contained in the pustules formed on the mucous membrane of the mouth, which is quite harmless; whereas he considers that the saliva, the blood, and the liquid taken from the crusts are septic in their nature. It is a significant fact that all the cases in his charge were quite simple in their course, whereas a person who had inoculated himself with the liquid proceeding from a cutaneous pustule was affected with angioleucitis.

## THE WEATHER.

WITHOUT indulging in unreasonable alarm we cannot help regarding the long continuance of the present cheerless weather as likely to produce a great strain on our national resources. On all sides we hear disastrous accounts of the condition of the crops, and the Registrar-General informs us that the death-rate in every week of the first half of the year, except two in February and four in June, has been above the last ten years' average. This excess represents the actual deaths of those whose state of health was likely to be affected by adverse meteorological conditions, but the cold, damp, sunless weather must be sowing the seeds of disease and death in many feeble constitutions, and for all is a bad preparation for the coming winter, especially if this should be accompanied by much privation and anxiety. Gloomy as our prospects for the next few months unquestionably are, there is no reason for despondency. Bad as the outlook is, we doubt if matters are nearly as bad as they were in 1838 and 1839. In the former year the rains of the summer and autumn were so incessant that the merchants of London, Manchester, and Glasgow, who were aware of the connexion between an unfavourable harvest and the importation of grain, and the consequent exportation of precious metals, on coming to the front of the Royal Exchange, and looking up to the watery sky, were wont to exclaim, "The Bank will break! the Bank will break!" The year 1838 was followed by a year equally disastrous; the quantity of rain which fell in every part of Great Britain in each of these two years was double the usual amount. Great distress undoubtedly ensued throughout the country, but wise measures were adopted by the Government, which led in 1844 to a flood of prosperity which overspread the country for more than two years, till the reaction caused by over-speculation, the result of this prosperity, again brought anxiety and distress among the population. The conditions of 1860 were very similar to those now prevailing, and those who look upon the incessant rains of the present year as a judgment for national sins may reflect that this year, as in 1860, we are threatened with a worse visitation than mere pecuniary loss, anxieties, and privation. In 1860 the cholera was threatening England, and it was the opinion of many eminent sanitarians that the enemy was warded off by the heavy rain cleansing the drains, and giving the poor an abundance of sweet, clean water. This year the plague has threatened Europe, and, although we know but little of laws that govern its development, we may reasonably surmise that any tendency to spread westward would be retarded by low temperature, an atmosphere incessantly washed by rain, and the prevalence of westerly winds. That the winter will be attended with much suffering to the poor and lower middle-classes we fear there is too much cause to expect, looking at the condition of trade and the harvest prospects. It is therefore the duty of us all manfully to confront the possibilities of a season of sharp distress, and to make ample preparation for the relief of those on whom the blow may fall most severely.

## THE NEW INFIRMARY FOR THE HOLBORN UNION.

THE opening, on Saturday last, of the new infirmary, Upper Holloway, for the sick poor in the various parishes known as the Holborn Union, is an event which calls for some notice. It is a part of a policy which originated in humane consideration for the sick poor, but which, in the long run, is quite consistent with consideration for the much-enduring ratepayer. The hospital in question is a fine building. It will cost £80,000, and in the number of its beds (620) will bear comparison with such institutions as St. Bartholomew's, Guy's, or St. Thomas's. On Monday the foundation-stone of a still larger institution of the same sort was laid for the sick of Marylebone. This building is to cost £100,000, or £160 per bed. Mr. Sclater-Booth presided at Holloway, and struck the right note when he said that the ratepayers will benefit by an institution in which the sick would have every advantage of air and sanitation. Much of the disease of the inmates of pauper hospitals is of the nature of degeneration brought about either by disease or by age. It is of great importance, however, that in such large hospitals care should be taken to provide really good medical advice. Six hundred sick are capable of great suffering, and it seems to us a very responsible part of the duties of those who administer such institutions as this to see

that no ill-judged parsimony prevents the appointment of medical officers with high capacity for relieving suffering. Another reflection which occurs to us is this—that these institutions might be more largely utilised than they are for the study of many forms of disease. Students, and pathologists too, would find in them cases and groups of cases which would well repay attention. Some of our contemporaries have viewed the event from the charity organisation point of view; and doubtless there is much to excite reflection in the significance of such masses of sick poverty and the demand of them on the ratepayers, whether charitably disposed or otherwise. There is, however, in these cases no question of abuse of charity, so far at least as the actual present condition of the patients is concerned. The inmates will be veritable paupers, and all the precautions which the experience of the relieving officers and medical officers of the Holborn Union can take to prevent the admission of unsuitable cases will be adopted. As we have said, these institutions originated rather in the ill-treatment of the sick than in the abuse of the hospital. Strange to say, the sick asylums for infectious diseases, which originated in the same Act of Parliament, are monopolised largely by non-paupers. Sickness is the most powerful of all pauperising influences. But pauperising sickness itself is often caused by vice of one kind or another. If we are to have a Royal Commission of Inquiry there should be a medical section of it to investigate the connexion between sickness and dependence.

## ARMY MEDICAL DEPARTMENT.

THE usual notice has at last been issued of an examination to be held in August of candidates for commissions in the Army Medical Department. But no official intimation has yet been made of the conditions under which the successful candidates are to serve. Colonel Stanley, indeed, alluded to the subject in the House of Commons, after the Whitsuntide holidays, but the information he gave was, as we then pointed out, very vague. The Warrant which he promised is still under the consideration of the Lords of the Treasury, and what alterations they may make in it no man can tell. We strongly recommend intending candidates not to send in their schedules till the Royal Warrant is issued, or at least until such time as a distinct statement is made of its provisions, and a distinct pledge given that they will be carried into effect. If they neglect this very necessary precaution they will have themselves to thank should they afterwards find the conditions to be such as to leave the Department a bye-word in the profession.

## THE HEALTH OF CROYDON AND ITS WATER-SUPPLY.

THE health of Croydon in recent years, judged by the local fatality of zymotic disease, and especially of enteric fever and of diphtheria, cannot be considered satisfactory. Mr. Baldwin Latham, who, as a resident ratepayer and sanitary engineer, naturally takes a deep interest in the health of Croydon, has recently published, in the *Croydon Chronicle*, some carefully prepared statistics, which are intended to fix the responsibility for the high rate from zymotic disease upon the water-supply. These statistics show that during the past three years the Croydon death-rate has been equal to 20·0 per 1000 within the Water Company's area, whereas it did not exceed 13·5 outside the water district; the zymotic death-rate 3·5 per 1000 within, and only 1·9 without the water district; and, further, that the death-rate from fever (principally enteric) in these three years was equal to 0·51 per 1000 in the water district, while it was but 0·16 outside. The fatality of diphtheria and diarrhœa also showed fully as large an excess within the water area. These facts are interesting and valuable, as are all carefully prepared mortality statistics; but their application is far from obvious. There is every reason, indeed, to observe caution in adopting the conclusion at which Mr. Latham arrives—namely, that the excess of general and zymotic mortality within the area of the Water Company is due to the effect of the water-supply. If, as we presume to be the case, the area of the Croydon Water Company includes nearly the whole of the truly urban portion of the Croydon population, whereas outside the water area the population is more distinctly suburban in character, there appears to be a more obvious explanation of the difference in the death-rates than the effect of the Croydon water-supply. Mr. Latham's figures call, however, for careful examination at the hands of the local sanitary authority and of their medical officer of health.

## PRACTISING DRUGGISTS.

A CASE recently adjudicated in the County Court of the Birmingham district places the question of medical practice by druggists on a fairly satisfactory footing. It is again held to be a breach of the law to prescribe, in dispensing, without a medical qualification. This would seem as reasonable a view as that which debars a law stationer from acting as a lawyer. The man who engrosses a deed of conveyance must necessarily pick up a large acquaintance with technical phraseology, and would doubtless be able to compose an ordinary instrument from memory; but he knows, or is supposed to know, nothing of the application of specific forms to particular cases. So it is with the druggist. He has probably more formulæ in recollection than any ordinary practitioner, because he is perpetually reading the prescriptions of physicians and surgeons engaged in active business. Meanwhile he has no basis of knowledge of the organism in health or disease, and no means of acquiring that familiarity with disease and its symptoms which only clinical study grafted upon a systematic knowledge of the science comprehended in the curriculum of a medical practitioner can supply. The analogy of the two cases—that of the law stationer and engrosser of deeds with the druggist who dispenses medicines—should serve to convince the expounders, if not also the makers, of law, that the counter-practice of druggists is a trade misdemeanour to be punished and "put down."

## THE ORDER OF ST. KATHERINE.

As will be seen from our report of a meeting held at University College on Tuesday last, two of the nurses of the hospital have been appointed St. Katherine's nurses. We are glad to learn that these nurses are the oldest who are still actively engaged in the hospital. It is satisfactory to notice that the most faulty of the original regulations of the order has been altered, and that the Nursing Home is not to benefit pecuniarily by the honour conferred upon its nurses, but that the hospital is to receive a sum of money in recognition of its services in their training. The badges of the new order were appropriately and gracefully conferred by Lady Jenner.

## THE HOSPITAL SUNDAY OF 1879.

IT is gratifying in these bad times, and with these dull skies, to find that the sympathy of the London churches with the London hospitals is unimpaired. The Hospital Sunday collection was taken this year on a rainy Sunday, yet there is every reason to believe that the sum of it will exceed that of 1878. Already £24,522 has been received, and most of the Jewish collections, and several others, have yet to come to hand. We will venture to hope that at least £25,000 will be forthcoming for distribution, after paying all expenses. It is as it should be; bad times should lead to various economies, but they should be much

worse than they are even now before restricting contributions to hospitals and dispensaries. The Hospital Sunday Fund only needs to show wisdom in administration, and with returning prosperity it will receive still more substantial proof of the confidence of the public.

## DIPHTHERIA AT BLEADON (AXBRIDGE).

THE Local Government Board has issued a report by one of its medical inspectors, Mr. W. H. Power, on an outbreak of diphtheria in the village of Bleadon, in the Axbridge Rural Sanitary district. The outbreak began in the week ending Oct. 12th, 1878, and ceased in the week ending March 22nd, 1879. Within this period 68 cases, of which 17 proved fatal, occurred in twenty-four households. The village has 102 houses, and a population of 411. Of the persons attacked, 63·0 per cent. were between three and fifteen years of age, and 36·0 per cent. over fifteen. There were no persons attacked under three years of age. The majority of the cases attacked were exposed to chances of infection after the early cases had declared themselves, but school attendance appears to have played no part in the dissemination. No clue was obtained to the origin of the outbreak, and, excepting common insanitary conditions, no local circumstances were present which could help to a solution. Indeed, the inquiry was made at a date too far removed, as Mr. Power indicates, from the period of the outbreak to leave a reasonable hope that a search into its origin could be successfully carried out.

## FLOGGING IN THE ARMY.

THE concession made, somewhat late, by the Government in the matter of the lash is important, and to ourselves especially interesting, because it marks the virtual abandonment of a practice, first seriously questioned by Mr. Wakley, the founder of THE LANCET, in the celebrated Hounslow case. The cause for which the Coroner for Middlesex fought has been won. If the "cat" is only to be used for offences which are punishable with death, it becomes a capital penalty, and, as such, may be left to stand among the extreme measures which the law will take to avenge itself upon a criminal it is judged impossible to reclaim. We have finally got rid of corporal punishment in the army. No recruit need dread it except as he may fear the punishment of death. This is a great triumph, and it justifies the foresight of the man who so laboured that the success at which he aimed was assured, though deferred.

## THE CHOLERA EPIDEMIC IN INDIA.

IN addition to the cholera losses referred to elsewhere, we regret to observe that the disease has, according to a telegram in the *Daily News*, made its appearance in British Burmah, carrying off Dr. Lloyd, Army Medical Department, and several men at Thyetmayao. The deaths of Captain Clarke, R.A., at Kohat, Lieutenant Lord Ossulston, Rifle Brigade, at Abbottabad, and of Mr. Brook Sinclair, Bengal Civil Service, at Thull, near Kohat, all from cholera, have also been telegraphed to England.

Mr. J. JEFFREY BELL, B.A. Oxford, has been elected to the chair of Comparative Anatomy in King's College, as a successor to Professor A. H. Garrod, whose health, we regret to hear, has compelled him to resign. Mr. Bell is an assistant in the zoological department of the British Museum, and is well known as the able translator of Prof. Gegenbaur's "Elements of Comparative Anatomy."

SIR TREVOR LAWRENCE, Bart., M.P., has, we are informed, accepted the office of President of the Poor-law Medical Officers' Association.

THE first ordinary meeting of the Brussels Graduates Association will be held in the board room of the Hospital for Women, Christopher-street, Finsbury-square, E.C., on Thursday next, July 17th, at 8 P.M.

SIR WILLIAM JENNER has honoured the Midland Medica Society by accepting the invitation of their council to deliver the address at the opening of the ensuing winter session.

# MEDICAL REFORM.

MEDICAL ACT (1858) AMENDMENT BILL NO. 3.

THE inquiry was resumed at 12 o'clock, Friday, July 4th, the chair being again taken by the Right Hon. W. E. Forster.

Dr. WATERS, examined by the chairman, said—I reside at Chester. I have been a graduate of the University of Edinburgh since 1847, and a Fellow of the College of Physicians of Edinburgh since 1848. I was President of the British Medical Association in 1866. I am at present consulting physician to the Chester Infirmary. The British Medical Association was formed in the year 1832 under the name of the Provincial Medical and Surgical Association; when its sphere of operations was enlarged, that name was changed to the British Medical Association. The first meeting was held in Birmingham, the next in Bristol; but the President of the Council, Sir Charles Hastings, lived at Worcester, and the secretary of the Association also resided at Worcester. The first meeting outside England was held in Edinburgh in 1858, and a meeting was held in Dublin in 1867. We meet this year at Cork. Each member must be proposed by three nominators, and he is then balloted for. A majority of three-fourths of those present is necessary to secure an election. The membership is confined to registered medical practitioners. The number of members at present is as nearly as possible 8000, and it is steadily increasing. When I was president in 1866 the number was between 3400 and 4000, and there has been a steady increase from that time to the present. The Association has about thirty branches, which hold annual meetings, and many of them also intermediate meetings. The Council of the Association consists of the president, the president elect, the treasurer, the president of the Council, all the gentlemen who have read annual addresses, or presided over sections at the meeting of the current or the preceding year, and a secretary from each branch. These are all *ex officio* members. There are, besides, representatives on the Council in the proportion of one to every twenty members of a branch. The president is elected by the vote of the Association at the annual meeting. He is, first of all, president-elect, being proposed at the meeting preceding that at which he will fill the chair. The Council may meet at any time on the requisition of a certain number of members, but, as a rule, it meets only once a year. It elects the Committee of Council, which is the executive for the Association. The business is managed very much by the Committee of Council, which is formed of the President, the permanent Vice-President, the President of the Council, the treasurer, the secretary of each branch, and twenty members elected by the general body of the Council. They are obliged to hold four meetings in the year. Other meetings may be called, and, as a rule, I should think from twenty-five to thirty members meet; sometimes more. The Association was formed for the promotion of kindly intercourse between the members of a scattered profession, and also for the promotion of science and the discussion of all questions connected with the public good in relation to the profession. The subscription is one guinea, which entitles the subscriber to the journal of the Association. At the second annual meeting of the Association, Dr. Barlow read an address on Medical Reform. That address was widely distributed amongst the

members of the profession, as well as amongst the members of the Association. A general interest was excited in the question, and a Committee of the House of Commons sat in 1834, and received voluminous evidence in relation to the three divisions of the kingdom. Only the evidence with regard to England was published, and that filled a volume of about 800 pages, but the Committee did not make a report. As early as 1839 the Association arrived at the conclusion that it was indispensable that the numerous examining bodies should be brought together in some way, so that there might be somewhat like uniformity of examination and tests. Their objects were to secure good preliminary examination in general education, registration, uniformity of examination, reciprocity of practice, and the formation of a General Medical Council, on which all interests, including that of the profession, should be represented. Of these objects, registration and reciprocity of practice have been gained. Reciprocity was accepted by the licensing corporations, but at the time of the passing of the Bill of 1858 they declined to submit to a uniform scheme of education, examination, and fees. Though a Medical Council was formed, it was not formed in accordance with the views of the Association. In 1840 a Bill was introduced by Mr. Warburton and Mr. Wakley, the proprietor and founder of THE LANCET. That Bill embraced provision for the election of representatives from the profession in the proposed General Medical Council. In our first request for a General Medical Council the principle of direct representation was embodied. There are in the kingdom more surgeons than physicians, but the Association comprises all classes. It has, perhaps, more frequently happened that the president has been a physician, but on numerous occasions he has been a surgeon. At the last meeting in London Sir William Fergusson was president. I think it may be most truthfully stated that the *élite* of the profession now belong to the Association. Several gentlemen who have a large metropolitan practice attend the meetings. For instance, Mr. Callender and Dr. Sieveking. I do not see how the statement that the Association really represents the profession can be fairly challenged. I cannot say how many of the members are English. There are about 23,000 names of practitioners on the Register, but many of them are in different parts of the world outside the United Kingdom. The Irish Medical Association was formed with similar objects before the operations of the British Medical Association extended to Ireland. The proportion of Scotch and Irish members residing in Scotland and Ireland is very small compared with the English members. The Irish Medical Association works in harmony with the British Medical Association on the question of medical reform. I do not know that there has been any schism in the Association. The Bill of the honourable member for Exeter was introduced in connexion with the Association; petitions in support of it were sent from Scotland and Ireland, though they have not been numerous in consequence of the feeling in favour of Conjoint Boards not being so strong in those divisions of the kingdom as in this country. That Bill owed its origin to the unsatisfactory condition of the Government Bill when it was first introduced. While the English medical authorities were working in the direction of establishing a Conjoint Board, the Association suspended Parliamentary action in order to leave the field clear. We felt that if it were established in England the strength of the Association in trying to enforce it in Scotland and Ireland would be greatly increased. We believe that a number of men of deficient attainments, both professionally and in general education, got into the profession through the facilities afforded by the existence of different examining boards. The chief opposition to the conjoint boards comes from Scotland. The officers of the Association see no reason why the universities should not co-operate with the corporations in Scotland, inasmuch as the universities are, equally with the licensing bodies, examining boards. We advocated the conjoint board scheme in 1870, and we advocate it still. We flatter ourselves that the compulsory nature of the Bill is to some extent due to the action of the Association. We took the opinion of our constituents last year on the question whether the conjoint scheme should be compulsory or not. The result of the answers was 4910 in favour of compulsion, and 264 against it. On the question of direct representation the answers were 5075 in favour and only 121 against it.

The CHAIRMAN.—What is the chief reason why you desire direct representation?

Dr. WATERS.—First of all, when the Bill of 1858 passed, we were obliged to accept only six Government nominees, and the corporation representatives had undue preponderance, though they were the parties who had to be controlled by the Council.

The CHAIRMAN.—Would your view have been met if there had been more than six Crown nominees?

Dr. WATERS.—No, it would not. We had never given up the principle of direct representation. I do not think the corporations are fair representatives of the profession. Even Mr. Simon, in his memoir to the Privy Council in 1873, designates those representatives as "delegates." The office of a delegate is to take care of the special interest committed to his guardianship.

The CHAIRMAN.—But if your objection is well founded, there are two ways of meeting that: one, to make the Council no longer representative of the corporations; and the other, to reconstitute the corporations themselves.

Dr. WATERS.—The representative of a corporation will necessarily, as his first duty, take care of the individual interests of the corporation he represents.

The CHAIRMAN.—In what way can the interests of the corporations clash with the general interest of the profession?

Dr. WATERS.—The corporations were all, in the first instance, formed with a view to the public good, but in process of time they had found it to their pecuniary advantage to act in a certain way, and the licensing corporations will have their funds materially impaired by the reform advocated. When the subject of the conjoint scheme was introduced in the General Medical Council in 1868, Dr. Alexander Wood said it was too much to expect the licensing bodies to perform the "happy despatch," and I believe that at the present moment the Royal College of Surgeons of England, powerful as it is, feels that if the conjoint scheme be not extended to Scotland and Ireland, it will be very detrimental to its own interests.

The CHAIRMAN.—But supposing that the governing body of the College of Surgeons were elected by the surgeons of England, would your objection be removed?

Dr. WATERS.—Certainly not. The representative would still be the representative of the corporation, and not of the profession.

The CHAIRMAN.—Do you think that the General Medical Council has failed in doing what it ought to do for want of direct representation; and, if so, in what way?

Dr. WATERS.—In the General Medical Council the representatives of the corporations meet as friends and form a pleasant party, and it is a very unpleasant thing to mar the harmony of their meetings by the introduction of subjects of a disagreeable character. The consequence has been an amount of mutual forbearance that has tended to keep back the education of the profession. Although they are now in favour of conjoint boards, I think it has been forced upon them by outside pressure and by the influence of the Government.

The CHAIRMAN.—That points to delay; but can you tell us of anything you think the Council ought to have done which it has refused to do, and which you think it would have done if there had been direct representation?

Dr. WATERS.—In the year 1868, when Dr. Parkes called attention to the lamentable ignorance which characterised the members of the medical profession who presented themselves for examination before the Army Medical Board, it fell like a bombshell upon the profession. Dr. Parkes was a Government nominee, not the representative of a corporation; but the Council could scarcely have been ignorant before of the fact that the profession was not creditably educated. The reports of the visitors at examinations revealed such ignorance on the part of candidates that it could not have been previously passed over if there had been representatives of the profession on the Council.

The CHAIRMAN.—Are you prepared to give any instance of that?

Dr. WATERS.—Yes. In one of the papers at the Queen's University in 1873 a candidate, in reply to the question, "Why does the water ascend in a cylinder?" wrote, "Because the piston attracts it." Another spelt region "regon," and sudden "suddent." The Council should have made representations on the subject to the Privy Council. Notwithstanding the disclosure of such an amount of ignorance that Council has not, for years past, repeated the visitations, but has left the bodies to go on, it may be, in the same vicious mode of proceeding.

The CHAIRMAN.—I think if you turn to another part of

the report of the visitors in the case you have referred to you will find that of the twenty-four who presented themselves for examination five were rejected and two withdrew, and I should rather gather that the answers you have quoted were by those who had failed.

Dr. WATERS.—But every medical student is required to pass a preliminary examination in general education, and I say that that man who spelt so badly never should have been admitted as a medical student. There is one great vice with regard to the preliminary examinations, and that is that the licensing bodies themselves examine. I have present to my mind now M.D.s who if they wrote a letter would manifest an amount of defective education which would be very unbecoming even on the part of a National schoolmaster. Not very long ago I met a graduate of a university, and in conversation with him his English struck me as being very defective.

Sir TREVOR LAWRENCE.—Which university?

Dr. WATERS.—I would rather not say, because then the man would know to whom I am alluding. It was not the Queen's University. I think the Medical Council has not fulfilled its duties with regard to education with sufficient energy.

The CHAIRMAN.—I suppose there can be no doubt that all the members of the Committee of Council of your Association would pass an examination in writing and spelling?

Dr. WATERS.—I think we could pass a technical examination. I cannot say that the Council fails in its duty with regard to the Register, though there were a great many errors in the Register last year. I do not object to the Pharmacopœia, but I think it has cost an enormous sum of money.

The CHAIRMAN.—Do you wish the Council to undertake any fresh duties?

Dr. WATERS.—I think the Council might with advantage have taken action on such an important subject as vaccination. I am of opinion that there should be some body to advise the Government, or to whom the State could refer, and that body should represent the opinion of the profession collectively. That would be of more avail than an expression of opinion by a voluntary association or by eminent persons in their individual capacity. Our Association has been in existence since 1832, and it was only after twenty-five years' unceasing agitation and labour that the Bill of 1858 was passed. I am not commissioned in any way to ask that the Medical Council should be empowered to deal with such questions as remuneration of services by boards of guardians. The method of direct representation proposed is that voting papers should be sent by post, by the registrar, to every member of the profession in the kingdom. The answers will have to be signed, and witnessed, and returned. The votes will then be counted, and the elected candidates declared. Every member of the profession will be eligible, but each candidate must have at least twenty-five nominators, and we consider that the names of the nominators will, to a great extent, guide the profession generally as to the eligibility of the candidates. I have no doubt, if the Committee of Council of the Association selected any person as a candidate he would become a representative on the Medical Council, but the Council of the Association most distinctly disclaims acting in this matter only for the Association. It acts for the whole profession. An educated constituency such as the medical profession may fairly be assumed to be able to form an estimate of the merits of the respective candidates.

The CHAIRMAN.—Do you apply the principle of direct representation in the election of members of the Council of the Association?

The CHAIRMAN.—Do you apply the principle of direct representation in the election of members of the Council of the Association?

Dr. WATERS.—To a certain extent, and we only wish to apply it to a certain extent in the case of the General Medical Council. It is to be hoped that every member of the profession would take an interest in the election; at all events they would have an opportunity of doing so, and I do not think there would be any difficulty in carrying it out. If a direct representative resigns or dies, the Medical Council will elect some one to fill his place, so that there will be an election only once in five years. I do not believe that professional agitators will have the most remote chance of being elected. I think that eminent men will still be chosen, but the advantage will be that they will carry with them the force of being representatives of the profession. In the penal clause of our Bill we make express provision against anyone assuming the title of "surgeon-dentist," "surgeon-accoucheur," or "physician-accoucheur." The men who are surgeons or physicians as well as dentists will have representation, but dentists who are simply mechanical dentists are, in my opinion, not members of the medical profession.

*Examined by* Mr. MITCHELL HENRY.

Dr. WATERS.—I have no complaint to make against the Medical Council with regard to the Register, but more confidence would be felt in the action of the Council, when a member of the profession is struck off the Register, if there were direct representatives on the Council. Practitioners in London often give prescriptions which are not in the Pharmacopœia. There are many men who drive a very lucrative trade in connexion with certain peculiar branches of medical practice, and I think their names should be struck off the Register.

Mr. HENRY.—Do you mean that the different licensing bodies should have the power of striking off the names?

Dr. WATERS.—If they have the power they have never exercised it, and if they have it not then steps should be taken to obtain it. I do not refer to persons who practise special systems of medicine, such as hydropathy, but to quack advertisers. I am quite aware that in the course of twenty-one years the Medical Council has struck off some names, but the action of the Council should be quickened, though not so much in that respect as in the matter of education. The conjoint scheme is not popular in Ireland. The northern branch of the Association in that country passed a resolution in favour of direct representation as distinct from the conjoint scheme at its last meeting, and would not petition in favour of the Bill of the honourable member for Exeter because it included the conjoint scheme. I am convinced that a conjoint scheme will never be adopted unless it is made compulsory by Act of Parliament. The medical profession, in my opinion, is better educated in many respects than it was twenty years ago, but it has not kept pace with the general progress of education throughout the country.

Mr. HENRY.—Would you think it desirable in the interests of the public and the profession to have a short Bill passed making the conjoint scheme compulsory?

Dr. WATERS.—I think legislation should be as complete as possible. I am not prepared to say that I would rather have no compulsory scheme for conjoint examination unless other matters were included; but I think the influence of the profession would prevent the passing of any Bill that did not concede the wishes of the profession. One of the most distinguished statesmen of the present day told me that no Government, however strong, could pass a Bill which was in opposition to the wishes of the whole profession.

Mr. HENRY.—Do you think the medical profession would oppose the passing of any Bill for a conjoint scheme which did not include direct representation?

Dr. WATERS.—I believe there would be such a strong opposition in favour of direct representation that it would be most difficult to pass any Bill without it. The object of the Bill which I approve is to get one-fourth of the Medical Council direct representatives and one-fourth Crown nominees, to balance the corporation representatives, but the Association is not pledged to any special number. The Association would desire to see some of the present medical authorities, whose *raison d'être* is at an end, at an end also, but it has not put that forward in the Bill because it does not wish to arouse opposition. I think it would be very injudicious to diminish the number of members of the Council to any great extent, because that would prevent the formation of committees which could do a great deal of the work. An examiner of the Royal College of Surgeons of England told me that the spelling of the candidates at the examinations of that body was atrocious.

Mr. HENRY.—I remember a Secretary of State being complained of as spelling badly, and the Prime Minister said, "You are not to expect a perennial well of English in Downing-street."

*By* Mr. PLUNKET.

Dr. WATERS.—I cannot see any reason for the Apothecaries' Society of Ireland having a member. I would let the Royal Colleges and the universities each have a representative. No men know so well the defects of the system of education as those who have passed through it recently, and

consequently their representatives would bring to the Council a knowledge of certain difficulties which exist in relation to education. I wish to see a greater number of professional doctors on the Council than at present. I think the speeches at the Council might be limited to a certain time. In my opinion very great good would be derived from a discussion on such subjects as medical jurisprudence in the Medical Council. I do not say that they should discuss such matters, but I believe no harm would result from such discussions. The Association thinks that a majority cannot be obtained in Parliament for any Bill which does not include direct representation, because the profession exercises considerable influence in constituencies.

Mr. PLUNKET.—Supposing a majority of the House of Commons decided against direct representation, do you think it would be a wise and right thing to obstruct the progress of the Bill as a leverage to secure direct representation?

Dr. WATERS.—That is an extremely difficult question to answer. In 1870 the Association was pledged as a body to obtain direct representation, and the Direct Representation Committee were instructed not to accept any Bill which did not include direct representation, and as chairman of the committee I should feel bound to act according to the wishes of the Association. Personally I am unquestionably in favour of a conjoint scheme.

*By* Mr. WHEELHOUSE.

If a Bill for a conjoint scheme is passed without direct representation the whole future of the profession will be handed over to the General Medical Council, and if it is important to have direct representation at any time it is so now. In my position as regards the Association I cannot say that I am prepared to accept any incomplete measure.

*By* Dr. LUSH.

I do not see that the two Apothecaries' Societies exercise any beneficial influence either on education or for the public, and I do not think they are entitled to representation in the General Medical Council, when the great University of Edinburgh has only half a representative. I do not think the administrative power of the Medical Council is at present sufficient. I would give them greater power over the licensing bodies.

*By* Mr. ERRINGTON.

If the profession had thought their votes would have influenced legislation, I think we should have had an enormously greater number of returns to the circulars that we issued last year, but there has been a feeling of disappointment and languor creeping over the profession which has had a great deal to do with diminishing the number of replies that were obtained. I rather think that the opposition to the conjoint scheme is more pronounced now because the belief has been engendered that certain of the medical authorities in Ireland and Scotland will suffer more than they formerly imagined. I think we should diminish the number of licensing bodies as much as possible, and make the admission to the profession through one portal. My view is that the consideration of matters affecting the general interests of the profession ought not to be incumbent on the General Medical Council, but it would be a very proper body to discuss them. I would have the scheme of education sanctioned by the Medical Council, and, indeed, originated by them. At present they entirely ignore that matter.

The Committee then adjourned till Monday.

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The Select Committee on this Bill reassembled on Monday, July 7th, under the Presidency, first, of the Right Hon. W. E. Forster, and subsequently of Dr. Playfair.

Dr. WATERS was recalled and said, in answer to Mr. Maitland.—The Medical Council has interested itself on several occasions in general matters. It has considered the subject of inquests, vaccination, and medical evidence, and latterly it has considered the interests of dentists and obstetricians, and has also taken up the question of vivisection. With regard to such subjects, I think direct representation would bring a great amount of knowledge to bear upon the deliberations of the Council in public, and still further in private, intercourse between the members. The consideration of such subjects would be more frequent that at present. When once this question of the conjoint scheme is settled, there remains comparatively little for the Council to do, except in regard to visitations and examinations, so that they will have time for the consideration of matters of public interest. The profession is unanimously in favour of improvement in medical education, but it has been resisted by some of the licensing bodies. Direct representation would bring greater pressure to bear upon those bodies. If there had been direct representation when the disclosures were made, it would have been impossible for five years to have passed without a fresh visitation. Dr. Parkes was not a corporate representative, and I believe that but for his action the ignorance of those who came to the Army Examining Board would never have been disclosed. It fell like a bomb on the profession and the Council. I admit there has been a certain improvement in medical education, but it is not *pari passu* with the improvement that has taken place in general education.

*Examined by* Mr. MILLS.

With regard to the constitution of the Council of the British Medical Association I may say that, with one exception, it is composed entirely of members who are freely elected year by year by the members of the different branch associations. Each branch elects one member of the Council for each twenty of its members. It also elects its treasurer triennially by an open vote of the Association. The Association, in advocating the principle of direct representation, believe that the simplest plan would be the issue of voting papers to the members of the profession generally; but if there be an insuperable objection to so large a constituency, the universal suffrage of the profession might be tempered by an elective committee of one per cent. of the profession, which committee might elect from itself members to represent the profession in the Medical Council. The Association has always desired to act in harmony with the Council, and to do away with the anomaly of the Council and the profession being in antagonism. I do not agree with Mr. Simon when he said that the movement in favour of direct representation was not connected with the desire of educational improvement, and came to a fever height in consequence of the articles in the *Medical Mirror*. I do not know a single member of the profession who has been in the habit of reading the *Medical Mirror*. I believe that the petitions in favour of direct representation represented the deliberate judgment of the profession. If the principle of direct representation were adopted I believe it would materially contribute to the harmony of the profession. Dr. Andrew Clark, the president of the Metropolitan Counties Branch, has recently read a paper on Medical Education, the discussion of which was adjourned. If the paper meets with general approval—as probably it will—is it not natural, if there were direct representation, that Dr. Andrew Clark would have his nomination supported by five hundred or six hundred of the profession? And would not their names carry weight, and influence others to vote in the right direction? I believe the best men in the provinces and the metropolis would be returned.

Mr. MILLS.—What view does the medical press generally take in regard to this subject?

Dr. WATERS.—THE LANCET, which is an organ of medical opinion of the greatest importance, has stood up in perhaps a more unqualified manner than we have done for the necessity of direct representation. The *British Medical Journal* is the journal of the Association, and it is impossible that it should advocate opinions opposed to any large section of the members without eliciting disapprobation. I cannot speak absolutely of the *Medical Times and Gazette*; its tone is rather uncertain. The *Dublin Medical Press and Circular* is in favour of direct representation.

*By* Dr. PLAYFAIR.

I approve of the principle that the first two examinations should be conducted by the universities themselves, and the final examination only by the Conjoint Board. The conjoint scheme is not in such favour in Scotland simply because it is supposed that it will be prejudicial to the universities. The universities are now opposed to it, but I believe that outside the corporations there is a strong feeling in favour of the conjoint scheme.

*By* Sir TREVOR LAWRENCE.

To a certain extent, my position as President of the Association in 1866 interfered with my practice, but then it must be remembered *per contra* that being President rather helps one in the estimation of the public. I believe that direct

representatives would be amenable to the bar of the profession, and that it would be impossible for them to advocate the interests of the corporations as opposed to those of the general profession. The Medical Council has, to a certain extent, yielded to pressure, but not sufficiently. I believe there has been a decided improvement in the teaching in some of the schools. I do not think the strain upon the students is too great for men of moderate ability and diligence. Botany and chemistry might properly form a part of preliminary education. I would not increase the curriculum of the Edinburgh University, but I would have the curricula of all the licensing bodies up to the mark.

Sir T. LAWRENCE.—Is there any country in which the representative system you advocate exists?

Dr. WATERS.—There is no other country where the representative system exists as it does in England. As to the United States, medical education there is in a most lamentable condition.

Dr. GLOVER was the next witness. He said, in answer to Mr. Forster: I am a Doctor of Medicine of Edinburgh, Licentiate of the Royal College of Surgeons, Edinburgh, and Licentiate of the Society of Apothecaries. I have been in practice in Highbury fifteen years as a general practitioner; I am on the staff of THE LANCET, and have had more opportunities, perhaps, than most people, not members, of seeing the working of the Medical Council. I have the highest respect for the members of the Council, but I object to the constitution of that body, especially the predominance of corporate interests. I regret that the Scotch universities are using all their power in opposition to the present demand for a Conjoint Board. I think the history both of the examining boards and of the Council shows that corporation influence is injurious. I have the strongest practical objection to the constitution of the Council. In its great work of education it has failed, I do not say altogether, but seriously, especially when we remember the eminence of its members, the large sum of money it has received, and the length of time it has had to do the work which it has not done. It has decidedly done some good, but far less than it might have done at a less cost of time and money. My great complaint is, that while the Council has greatly added to the stringency and severity of the examinations, it has not made any corresponding improvements in medical education. It first took up the matter in 1859, when a report was presented expressing the opinion of the Council as to the necessity of preliminary education, and stating that by the next year the committee hoped to be able to formulate its views on the subject; but I think I should not be wrong in saying that up to the present time the Council has not given a deliberate opinion on the methods and details of medical education. The question has been brought forward on two special occasions: first at the instance of Dr. Parkes in 1869. Previous to this, in 1864, he had made statements of his experience as an examiner in the Army and Navy Medical Boards, showing the shocking ignorance of men who had passed two of the licensing bodies. The disclosures which he made led to the formation of a committee. The second special occasion was in 1876, when the returns from the examining boards began to accumulate, and showed clearly that the number of rejections at the *final* examinations had steadily increased, from 12 to 23 per cent. The Council has paid more attention to the stringency of the examinations than to the efficiency of the schools. The committees of the Council in 1869–70 paid considerable attention to the length of the curriculum and the mode of teaching, especially desiring that it should be more practical. They also suggested that the students should be examined in class, and that such examination should be certified. They further recommended the separation of materia medica and therapeutics, and a six months' course of practical instruction in midwifery. The conjoint scheme for England requires only a three months' course in midwifery. Yet the Council has lately sanctioned it, as though the Council had forgotten its own recommendations in 1869. I will put in some tables showing the rejections at the *first* professional examination in 1867 and in 1877. In 1867 the rejections were 24 per cent., and in 1877 36 per cent. The Royal College of Surgeons of Edinburgh rejected 40 per cent. Some of the largest rejections were from bodies whose examinations might be thought to be most easy. Of course the rejection of a student might arise either from his own state of unpreparedness, or from the nature of the examination. Students might think they would get off easily, and find the examination harder than they expected.

Mr. FORSTER.—Does not the increased stringency of the examination have a direct effect in improving the education?

Dr. GLOVER.—No doubt it tends to do so, but still the student has no power over the methods of the schools or the teachers. In 1876 a Committee of Education was appointed, and after a very long discussion only two resolutions of any bearing on medical education were passed.

Mr. FORSTER.—Your objection is the same as that which is made to other representative bodies, including one of great eminence, that there is more talk than action in the Council?

Dr. GLOVER.—Yes, and that it does not do the main work it was created to do. I do not think it required a council of twenty-four eminent men to make a Register. The first of the resolutions in 1877 to which I have referred was in favour of the examination of the student at the end of the first year, tending to give him a sense of responsibility from the outset of his work. The second was in favour of more tutorial methods of teaching, saving the student from attendance on so many lectures. As far back as 1864 a similar resolution was passed with regard to lectures—that no student should be compelled to take the same subject more than once. Up to the present time not the slightest action has been taken upon these resolutions by any of the bodies in the country. The Reports of the Education Committees have been very disrespectfully treated. They have been brought on at the end of a sitting when the members were tired and wished to go home; they were passed on to the next year's meeting with the understanding that they should be taken early, and sometimes the next year has come and gone without any mention of them. This was the case in 1873 and again in 1876. Besides the recommendations I have mentioned, it was recommended that pathological anatomy should be made a separate study, and that there should be some limitation of the extent to which the teaching of these subjects should be carried. It was further recommended that class examinations should be certified and compulsory, that there should be a combination and consolidation of the licensing boards in each division of the kingdom, and that education should be practical. Not one of these suggestions has yet the force of law. The Council has had no power to enforce the improvements in medical education which it has felt to be necessary. No power was given to it in the Act to interfere with the curricula of the different schools; it only had power to make representations to the Privy Council.

Mr. FORSTER.—Then you do not blame the Council, but the Legislature?

Dr. GLOVER.—I blame the Council, because when it saw that its recommendations were not taking effect it did not ask for more power.

Mr. FORSTER.—In 1869 it did ask for more power?

Dr. GLOVER.—In 1878 it declined more power. When it was proposed to give the Council power to regulate courses of study and medical education, it virtually requested to be excused, and wished to leave the details, upon which it had been making fruitless recommendations for ten or twelve years, in the hands of the medical bodies.

Mr. FORSTER.—How do you explain this bad working of the Council?

Dr. GLOVER.—First, there is a want of responsibility; and, secondly, timidity—a fear of the bodies of which it is composed. I would alter its constitution, and make it responsible by giving it more power.

Mr. FORSTER.—How would you reduce the corporation influence?

Dr. GLOVER.—I would strike out some of the corporations.

Mr. FORSTER.—That is a strong measure to propose. On what grounds do you propose it?

Dr. GLOVER.—Upon the ground that some of these bodies are evidently not wanted longer in the economy of things. They came into existence under different conditions from those which now obtain, and their further occupation of seats in the Council cannot be defended.

Mr. FORSTER.—Which would you strike out?

Dr. GLOVER.—So as to be impartial, I would name one in each division of the kingdom. I should say that the Irish Apothecaries' Society can be dispensed with. Then the English Apothecaries' Society, though it has done good work, is certainly no longer needed; and I think one of the Scotch corporations might be dispensed with. I do not like to say which body, but perhaps the Faculty of Physicians and Surgeons, so leaving two Royal colleges. Until the

Act of 1858 the English Apothecaries' Society gave the only qualification in medicine for English practitioners. It cannot examine in surgery.

Mr. FORSTER.—Do you think there is any truth in the allegation that the members of the Medical Council do not understand the wants of the general practitioner?

Dr. GLOVER.—I do think there is a great deal of truth in that. They are men of eminent abilities, and most of them originally of good social position; many of them have had a continental education and greater advantages than fall to the lot of most people, and under these circumstances I do not think they are likely to understand the difficulties of men who have to be content with the ordinary education of the schools. I remember being very much struck with a statement by Dr. Stokes in the Council that he had never been in the chamber of a lying-in woman. I am in favour of direct representation if it can be carried out. I do not care much about the method. I should be satisfied with the Crown appointing representatives of the profession. I think it absurd that the Edinburgh University, with 1200 students, should have only half a representative on the Council, while the Apothecaries' Society in Ireland has a whole representative.

*Examined by* Dr. PLAYFAIR.

I should like to read a few very powerful words from an address by the President of the Medical Teachers' Association (Mr. Simon) in 1868, as to the influence of the corporations on examining boards:—

"Think, gentlemen, what the Council of our College of Surgeons might have done in the last twenty-five years in promotion of medical science, if it had administered its great trust disinterestedly. Admitting to the profession annually several hundred members (sometimes, I believe, as many as 500, besides Fellows), with a fee of £22 a head, and able, I presume, to allot fully half of this very large income to the payment of a proper examining board,—what is the course which it has taken? It has treated the examinerships in its gift as mere lucrative perquisites of its own body, best to be divided among its own members; and, with scarcely an exception, the ten oldest members of the Council have been the ten examiners of the College, sharing among them the payment I have described. The elder members of the board have generally shown so much attachment to office that the succession of younger men has become more and more impeded; and of late, I believe, sixty years of age has been about the earliest time at which a man's turn could come to enter upon the functions and profits of an examiner at the College of Surgeons. Can you wonder, gentlemen, that medical education has languished in England, when suffering under an influence like this? As regards the mere examination in surgery, it has been bad enough that men should only be entering upon that duty at an age when, in a normal state of things, they would rather be preparing to abandon it; and I cannot but deem it to have been very mischievous, even for practical surgery in this country, that our examiners for long past years have been men from sixty to eighty years of age. But think, gentlemen, what the mischief must have been, in relation to the sciences of our profession, that during this period of unexampled scientific progress persons in the fourth and fifth vicenniads of life have been empowered to settle, according to their own dim lights, what should be the standard of scientific proficiency for men just entering the medical profession! And this state of things—this utter corruption....."

Mr. Simon was not then a member of the Council. I do not see any insuperable difficulties in the way of getting the votes of the profession. I have been told by the secretary of the Law Society, which is composed of several thousand members, that the council is elected by a direct vote of the members, and that it is done without difficulty and at an expense of not more than £50 a year. I would give the Council the power of visiting not only the examinations, but the schools. It should have the power of inspection and of complaint to the Privy Council. I do not think the universities would object to an inspection. As to the Register, it is a very good one on the whole, but it has never been considered a model of accuracy. In some years there have been many inaccuracies. The Council should have paid more attention to the improvement of the Register, but it has had so much to do in looking after the corporations and in discussing semi-political questions, that the Register has suffered from inattention. I wish also to say that the Council should show some disposition to punish those who fraudulently pretend to be on the Register, or abuse the privileges of registration. It has received £137,000 for the Register, and it owes something to the profession to vindicate its sanctity. Under the present system of examinations candidates may sometimes have to undergo two nearly identical examinations in order to receive a double qualification. I think that is very objectionable. There are several bodies like the Royal College of Surgeons, England, that do not give complete qualifications. If they are to exist as licensing bodies they ought to have complete examinations (which they have not at present), and give complete qualifications. Half qualifications ought to cease. I do not fully approve of the system of conjoint examinations prescribed in the Bill; it would be a great improvement on the present state of matters. I am strongly in favour of independent examining boards. I would give the Council the power of electing three examining boards, one for each division of the kingdom; but if that is impracticable, I think the conjoint system would be a great improvement. If there were an independent board I do not think candidates would be indifferent to the higher qualifications. The whole tone of professional feeling would be raised, and there would be an increased demand for higher education and higher degrees. I think the fees should be equal, or we might have the old charge of underselling. I approve of the first and second examination being by the universities, and the final examination by the conjoint board; but I think that the Medical Council should be distinctly represented in the university examining boards. There has been a huge amount of work thrown on the Council and its officials in connexion with the Dentists Act of 1878, interfering with its duties under the Act of 1858. I think the Council should undertake no further duties in regard to specialties. I think it undesirable that the Archbishop of Canterbury should have restored power which was lost by the Act of 1858.

*By* Mr. ERRINGTON.

I have been struck with the diminishing majorities on the Council in favour of direct representation. It is a proof of the vacillation of the human mind. I do not believe that the introduction of direct representatives would make the Council less efficient for its present purposes. Matters of policy affecting the interests of the profession generally should be taken up by voluntary associations. I think the Council is large enough at present. The principle of grouping the corporations might be carried farther than it is at present. I do not approve of the Bill introduced by Sir D. Corrigan some years ago. It assumes the incompetency of present boards of examination, and at the same time continues them in authority.

*By* Mr. MAITLAND.

The special army and navy medical examinations might, perhaps, be abolished if the authorities were satisfied with the present examining boards. There would, however, be some specialties of knowledge in regard to the army and navy which might require to be tested, but certainly a man who is entitled to practise on her Majesty's subjects generally should be entitled to a Poor-law appointment.

*By* Mr. WHEELHOUSE.

The licence of the College of Physicians, Edinburgh, is often supposed, but falsely, to confer the right to use the title of "Doctor," and that is a strong inducement to students to go to that college. I have no doubt, with the present loose regulations, it is possible for unprincipled students to get on the Register without having attended lectures. I think the interests of students have been too little regarded. Some of the intelligent senior students might be able to give information to the Committee as to the difficulties in their way. It would be a great advantage if the 18th Clause of the present Act were carried out, requiring the several bodies to furnish the Medical Council from time to time with information as to their course of study, &c. The power of making regulations was given to the Council in the present Bill. It was taken out at the request of the Council, but re-inserted, I am happy to say, in the Lords. I would rather postpone medical legislation than give up direct representation.

*By* Mr. MITCHELL HENRY.

It is to the interest of the schools to improve their education, but unless the Council has power to compel the students to do their duty, and indicate what their duty is, the work will be badly done.

*By* Mr. MILLS.

I believe the medical press is decidedly in favour of direct representation. The omission of that feature in the present Bill would, in my opinion, amount to its indefinite postponement.

*By* Dr. PLAYFAIR.

The licentiate of the College of Physicians, Edinburgh, has no legal right to the title of Doctor. If he assumes it, that is not the act of the College itself unless the College in some way encourages the notion that he is entitled to it.

The Committee then adjourned to Friday.

## THE ROYAL COLLEGE OF SURGEONS.

THE last meeting of the Council, under the Presidency of Mr. Simon, was held on the 10th inst., the newly-elected members taking their seats for the first time. The thanks of the Council were voted to Mr. Erasmus Wilson for his present of thirty-seven skulls from Fiji, and to Mr. Thos. Taylor for his catalogue of the Calculi in the Hunterian Museum. A portrait of Mr. Hilton, by Barraud, presented by Mrs. Hilton, was accepted by the Council. The retiring President presented his report, which extended over a period of thirteen months, instead of a year, as it had been considered better to make the report close with the end of its respective official year. The report is in the main an epitome of the minutes of the Council. In reference to the question of the Medical Bill, Mr. Simon suggests that if existing obstacles to proper general legislation for the profession cannot with the present great effort be surmounted, the College should proceed to concentrate their efforts on the perfecting of their own corporate structure and working. The senior Vice-President, Mr. Luther Holden, was elected President, and Mr. J. E. Erichsen and Mr. Erasmus Wilson Vice-Presidents.

## THE ALEXANDER MEMORIAL FUND.

AT a meeting of the committee of the Alexander Memorial Fund, held on the 9th July, 1879, at the Army Medical Department, 6, Whitehall-yard, it was unanimously resolved that the prize of £50 and a gold medal of the value of £10 be awarded to Surgeon John Martin, of the Army Medical Department, who joined the army 31st March, 1874, for the best essay "On the influence of drinking water in originating or propagating enteric fever, diarrhœa, dysentery, and cholera; to be illustrated, as far as possible, by instances which have come under the personal observation of the author." It was decided by the committee at the same meeting that a prize of like value, the competition for which is limited to executive medical officers of the army on full pay, be offered to the writer of the best essay "On the prevalence of enteric fever in the army; its etiology, pathology, and treatment; to be illustrated by the personal observation of the author." The essays to be despatched so as to reach the president of the committee on or before the 31st December, 1881.

## THE MURCHISON MEMORIAL.

THE following resolution was proposed and carried unanimously at a general meeting of the subscribers to the St. Thomas's Hospital Murchison Memorial Fund, held on July 5th:—"That with the view of uniting all the efforts being made to raise a memorial to the late Dr. Murchison, and to prevent any possibility of rivalry between the existing schemes, this meeting is of opinion that the St. Thomas's Hospital Fund should be amalgamated with that of the London and Edinburgh committee, on the following conditions:—1. That the Murchison Memorial Scholarship be thrown open to students from all the London medical schools. 2. That the sum of £300 be guaranteed to the St. Thomas's committee, for the purpose of raising a memorial to Dr. Murchison in St. Thomas's Hospital."

## "THE PAINLESS AND BLOODLESS METHOD OF EXCISING THE WHOLE TONGUE."

*To the Editor of* THE LANCET.

SIR,—I have just read with considerable astonishment, in your issue of to-day (July 5th), some clinical remarks by Dr. F. A. Purcell on the "Painless and Bloodless Method of Excising the Whole Tongue."

Dr. Purcell states that his senior colleague (Dr. Marsden), he himself, and his other colleagues have been in the habit, since the year 1875, of removing the tongue by an operation which he describes; but he omits to make the slightest reference to the paper in which that operation was originally suggested, and which appeared in THE LANCET for Feb. 8th, 1873.

This is the more curious, as he has borrowed without acknowledgment the identical engraving with which that communication was illustrated, and has embodied, also without acknowledgment, and even without using inverted commas, that portion of the text of the paper in which the instrument was described.

Dr. Purcell does, however, apologise to Mr. Bryant, who published a paper on the subject in THE LANCET of Feb. 28th, 1874, "for following him to a great extent"; an apology which I cannot but think in a measure inappropriate, as the identical engraving originally published in 1873, and now reproduced in 1879 by Dr. Purcell, was made use of by Mr. Bryant in 1874, without even a suggestion from him that it had appeared previously.

Thus, within less than seven years, the same illustration has been made to do duty in the columns of THE LANCET on three separate occasions and by three different contributors describing the same operation, without the slightest acknowledgment on the part of either of the two later writers, who were presumably the borrowers.

Surely this circumstance raises some nice questions in literary ethics, and points to the desirability of a somewhat higher standard of literary morality.

I beg to remain, Sir, your obedient servant,

Manchester, July 5th, 1879. WALTER WHITEHEAD.

# Obituary.

## CHARLES FREDERICK MAUNDER, F.R.C.S.

WE greatly regret to have to record the sudden death of this well-known surgeon, who was still at an age that held out promise of many years of successful activity. He was educated at Totteridge School under Mr. C. J. Thorowgood, and there was a general favourite, and won many prizes. On leaving school he was in 1849 apprenticed to the late Mr. J. G. Lansdown, surgeon to the Bristol General Hospital, and at this time wrote the prize essay of the Medical Society connected with that hospital. He soon afterwards came up to London, entered at Guy's Hospital, obtained his M.R.C.S. in 1854, and his F.R.C.S. in 1857. He was then appointed demonstrator of anatomy at the Guy's Hospital School, and is remembered by many as an enthusiastic and successful teacher of anatomy. But operative surgery was his specialty, and he studied it in Paris, in Edinburgh under Syme, and as an assistant-surgeon at the Renkioi Hospital, and in the field during the Crimean war. In 1860 he was elected assistant-surgeon to the London Hospital, and in 1869 was promoted to the rank of full surgeon. For about a year past Mr. Maunder had been suffering from irritability and vague nervous symptoms, and upon the failure of the West of England and South Wales Bank, in which he held some shares left him by his father, these symptoms increased in intensity, and his nervous system was so prostrated that he was advised by Sir Wm. Gull, Dr. Sutton, and his friend Mr. Richard Davy, to seek entire rest and change of scene. He applied for three months' leave of absence from the hospital, and left London, but a painful accident abruptly terminated his life, and he died at the age of forty-seven on July 4th, 1879.

Mr. Maunder had led an active professional life, and has left behind him as proofs of his ability as a surgeon and an author, a text-book of "Operative Surgery," and monographs on the "Surgery of the Arteries," "Abscission of the Lower Jaw without External Wound," and "Strangulated Hernia"; and an article in "Cooper's Surgical Dictionary" on "Intestinal Obstruction"; he was also the author of several papers published in medical journals and reports, and translated and edited Ricord's celebrated lectures on "Chancre," adding to it a paper on "Perineal Section of Stricture." Mr. Maunder, as he often said, "enjoyed a difficult operation," and he won his chief successes in this branch of his practice. In operating he was bold, dexterous, and neat, and took special interest in such operations as the ligature of a large artery and kelotomy. It is told of him that he once had four operations for the relief of strangu-

lated hernia within thirty hours, and that the enthusiasm produced by it was followed next morning by a severe attack of jaundice. His name is especially associated with excision of the elbow, and the use of the chisel in osteotomy, on both of which subjects he wrote valuable papers.

Those who knew Maunder best have lost a pure and true friend, whose fearless love of and regard for the truth and what he considered duty won for him general esteem, although at times it may have led to temporary misunderstanding. And the profession has lost a careful surgeon, who had accomplished much and promised more as a teacher and brilliant operator.

# Medical News.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on July 3rd:—

Cheesman, Geo. Edward Alex., Southampton.
Pryce, Evan William, The Farm, Montgomery.
Raine, Arthur Robert, Billericay, Essex.
Walford, Robert, Harrington-street, N.W.

The following gentleman on the same day passed the Primary Professional Examination:—

Hart, Robert Alfred Hellings, Guy's Hospital.

DR. W. THOS. EDWARDS, of Cardiff, has been placed on the commission of the peace for Glamorganshire, and Mr. Humphrey Lloyd Williams, M.R.C.S. Eng., for Merionethshire.

AT the quarterly meeting of the directors of the Naval Medical Supplemental Fund, held on the 8th inst., Dr. H. J. Domville, C.B., Inspector-General, in the chair, the sum of £70 was distributed among the various claimants.

A HANDSOME silver epergne has been presented to Dr. G. B. Thursfield, of Leamington, who has just completed two terms of five years each on the staff of the dispensary, as a token of gratitude from patients who have benefited by his kindness and skill at the institution.

THE deaths registered in London last week numbered 1208, representing a rate of mortality of 17·4 per 1000, a lower rate than has prevailed in the metropolis since September, 1877. Of the zymotic class of diseases, measles was the most fatal, accounting for 79 deaths, whilst 11 were due to small-pox, 38 to scarlet fever, 11 to diphtheria, 35 to whooping-cough, 11 to different forms of fever, and 13 to diarrhœa. There were 197 fatalities from diseases of the respiratory organs.

VACCINATION GRANTS.—Dr. Newham, of Winslow, Bucks, and Dr. Denton, of Steeple Claydon, have each received a gratuity for efficient vaccination.

EAST LONDON HOSPITAL FOR CHILDREN, SHADWELL.—Mr. Charrington, chairman of the Board of Management of this hospital, presided this week at the distribution of prizes in connexion with the training of nurses which is going on at this institution. The first series of lectures, which was given by Mr. Hayward, resident medical officer, during the past winter, consisted of elementary physiology and chemistry, each lecture being illustrated by experiments and demonstrations. Thus, among the other subjects, food and its digestion were fully explained, and also the chemistry of air, including ventilation and water. The lectures seemed to be highly appreciated, and at the end of the session an examination was held.

DEVONSHIRE HOSPITAL AND BUXTON BATH CHARITY.—The negotiations with the governors of the Cotton Districts Convalescent Fund for the extension of this hospital, by means of a grant of £24,000, under certain conditions, appear to have been at length brought to a satisfactory conclusion, under the sanction of the Charity Commissioners. By these additions the accommodation of the hospital will be increased from 150 to 300 beds, together with the advantages of an entire re-arrangement of its interior, the removal of two inner walls, which obstruct light, ventilation, and space, the covering in the large internal area—a space of nearly half an acre—and its utilisation for all purposes, as a protection from weather, for recreation, &c. &c., and the removal of all the remainders and reminders of what, it must not be forgotten, was originally built as a great range of stables.

# Medical Appointments.

APPLETON, G., M.R.C.S.E., L.S.A.L., has been appointed Certifying Factory Surgeon for the District of Lizard, Cornwall.

ATTHILL, W. E. B., L.R.C.P.I., M.R.C.S.E., has been reappointed Medical Officer of Health for the Faversham Urban Sanitary District, at £30 for one year.

BLEAKLEY, A. S., M.B., C.M., has been appointed Medical Officer and Public Vaccinator for the Blessington and Ballymore Dispensary District of the Naas Union, co. Kildare, at £125 per annum and fees, and £15 per annum as Medical Officer of Health, vice Maturin, resigned.

BOUCHER, A. H., M.B., C.M., has been appointed Junior House-Surgeon to the Birkenhead Borough Hospital and Dispensary, vice Ellison, resigned.

CARMICHAEL, J., M.D., C.M., has been appointed an Extra Physician to the Royal Hospital for Sick Children, Edinburgh, vice Underhill, promoted.

CURTIN, P., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer and Public Vaccinator for the Clane and Timahoe Dispensary District of the Naas Union, co. Kildare, at £125 per annum and fees, and £15 per annum as Medical Officer of Health, vice Hughes, resigned.

DOWSE, R. H., M.B., C.M., has been appointed House-Surgeon to the Newport, Mon., Infirmary and Dispensary, vice Marsh, resigned.

DRUMMOND, D., M.A., M.D., has been appointed Pathologist to the Newcastle-on-Tyne Infirmary, vice Bramwell, resigned.

FINLAY, D. W., M.D., has been appointed an Assistant-Physician to the Middlesex Hospital, vice King.

GAYLOR, E., L.R.C.P.Ed., L.F.P.S.G., has been reappointed Medical Officer of Health for the Alfreton Urban Sanitary District, Derbyshire, for one year.

GIMSON, W. G., M.D., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer of Health for the Witham Urban Sanitary District, at £10 10s. for one year, vice Tomkin, whose appointment has expired.

GRIFFITH, A. H., M.B., C.M., has been appointed House-Surgeon and Secretary to the Royal Eye Hospital, Manchester, vice Jones, appointed Assistant-Surgeon.

HARDWICKE, E. H., L.R.C.P.Ed., has been appointed Certifying Factory Surgeon for the District of Solihull.

HARLEY, Dr. H., has been appointed Medical Officer, Public Vaccinator, &c., for the Carrignavar Dispensary District of the Cork Union, at £120 per annum and fees, and £15 per annum as Medical Officer of Health, vice Lambkin, resigned.

HATFIELD, W. H., L.F.P.S.G. & L.M., M.R.C.S.E., L.S.A.L., has been appointed a Medical Officer to the Dewsbury and District General Infirmary.

HEPBURN, W. J., F.R.C.S.Ed., L.K.Q.C.P.I., has been appointed a Surgeon to the Meath Hospital and County Dublin Infirmary, vice White, deceased.

HETHERINGTON, R. P., M.B., C.M., L.M., has been appointed Assistant to the Resident Medical Superintendent, Sligo District Lunatic Asylum, vice Atkinson, resigned.

JAMES, W. D., M.R.C.S.E., L.S.A.L., has been appointed Public Vaccinator for the No. 1 District of the Ecclesall-Bierlow Union, Yorkshire, vice Harrison.

KARKEEK, P. Q., M.R.C.S.E., L.S.A.L., has been reappointed Medical Officer of Health for the St. Mary-church and Torquay Urban Sanitary Districts, at £200 per annum for four years.

KING, Dr. R., has been appointed a Physician to the Middlesex Hospital, vice Thompson, resigned.

LOW, C., M.B., has been appointed Resident Medical Officer to the Dundee Combination Poor-houses.

LYELL, R. W., F.R.C.S.E., has been appointed an Assistant-Surgeon to the Middlesex Hospital, vice Morris.

MACPHAIL, S. R., M.B., has been appointed House-Surgeon to the Greenock Hospital, vice Cairns, resigned.

MAGNER, E., M.D., C.M., has been appointed Medical Attendant to the Royal Irish Constabulary, Courceys, co. Cork, vice Hegarty, deceased.

MARKBY, T., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the St. Agnes District of the Truro Union, vice Whitworth, resigned.

MORRIS, H., F.R.C.S.E., has been appointed a Surgeon to the Middlesex Hospital, vice Nunn, resigned.

O'FLYNN, D. J., M.D., L.R.C.S.Ed., has been appointed an additional Medical Officer to the Carrigaline Dispensary District of the Cork Union, at £100 per annum (including salary as Medical Officer of Health) and fees.

ORR, H., L.R.C.P. & L.R.C.S., L.S.A.L., & L.M., has been appointed Medical Officer to the Independent Order of Odd Fellows, Pilley, Yorkshire.

PEARSON, T. R., M.D., Ch.M., M.R.C.S.E., L.R.C.P.Ed., has been appointed Medical Officer and Public Vaccinator of Thornaby District, in the Middlesborough Union, vice Laidler, deceased.

ROBERTS, J. Lloyd, M.B., C.M., has been appointed Medical Officer of Health for the Ruthin Rural Sanitary District, at £30 for one year, vice Jones, whose appointment has expired.

SMALLHORN, T., L.R.C.P.Ed., M.R.C.S.E., has been appointed Certifying Factory Surgeon for the District of Eynsham, Oxfordshire.

THOMPSON, W. H., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer of Health for the No. 2 Sub-district of the Stourbridge Rural Sanitary District, at £75 per annum, vice Dunn, deceased.

TURNER, F. H., M.R.C.S.E., L.S.A.L., has been appointed Certifying Factory Surgeon for the District of High Wycombe, vice Ruckley, resigned.

UNDERHILL, C. E., M.D., C.M., has been appointed an Ordinary Physician to the Royal Hospital for Sick Children, Edinburgh, vice Cumming, deceased.

WHITNEY, N. S., M.B., F.R.C.S., has been appointed Medical Officer for the Teddington District of the Kingston Union, vice Fitzsimon, resigned.

WILLIAMS, W. R., M.R.C.S., L.R.C.P.I., has been appointed Demonstrator of Anatomy at University College.

# Births, Marriages, and Deaths.

## BIRTHS.

GALLOWAY.—On the 2nd inst., at Roxburgh-street, Greenock, the wife of Allan Galloway, M.D., of a daughter.

KIDD.—On the 4th inst., at Brooklands, Blackheath-park, the wife of Joseph Kidd, M.D., of a son.

ROBERTS.—On the 30th ult., at Ruabon, the wife of Richard Lawton Roberts, M.D., of a son.

SWANZY.—On the 1st inst., at Merrion-square North, Dublin, the wife of H. R. Swanzy, F.R.C.S.I., of a son.

TITLEY.—On the 28th ult., at Brigg, Lincolnshire, the wife of James Titley, M.D., of a son.

## MARRIAGES.

COOPER—BROCKBANK.—On the 9th inst., at St. Bride's Church, by the Rev. Frederick Nelham, A.K.C., of Christ Church, Aughton, assisted by the Rev. William Thomas Gidney, M.A., of St. Bride's Church, Peter Cooper, Esq., M.R.C.S.E. & L.R.C.P.L., of Leyland Villa, Eltham-road, Lee, S.E., to Clarissa (Clara), third daughter of Robert Brockbank, Esq., of 20, Huskisson-street, Liverpool. No cards.

DALE—MCCLEARY.—On the 8th inst., at the Parish Church of St. Thomas, Camden New Town, London, by the Rev. Thomas Fellows, B.A., (Henry) Ridley Dale, M.R.C.S.E., L.R.C.P.Ed., &c., of Cousin-street, Sunderland (son of Henry Ridley Dale, of Ivy Lodge, Park Village East, Gloucester Gate, Regent's-park, London), to Rose, daughter of the late James McCleary, C.E., of Rochester-square, Camden-road, London.

WRIGHT—TINSON.—On the 2nd inst., at St. Paul's, Cheltenham, by the Rev. W. H. Wright (father of the bridegroom), Edward Arthur Wright, M.B., of Huddersfield, to Eleanor Jane Guion (Ellie), youngest daughter of the late George Tinson, Esq., of The Clevelands, near Cheltenham.

## DEATHS.

BEY.—On the 1st inst., at Donhead St. Andrew, Salisbury, Mary Isabella, the beloved wife of William Bey, M.B. & C.M.

BROWN.—On the 28th ult., at Hesket-Newmarket, Cumberland, William Brown, L.R.C.P.Ed., aged 53.

CLARKE.—On the 27th ult., at Wymondham, Norfolk, Caudell Clarke, M.R.C.S.E., aged 37.

HEGARTY.—On the 11th ult., William Hegarty, M.D., of Ballinspittle, co. Cork.

HURD.—On the 1st inst., at Frome-Selwood, Somersetshire, James Hurd, M.D., aged 72.

MCGREGOR.—On the 28th ult., at 63, Torpichen-street, Helenoré Brown, widow of Dr. McGregor, late of the Barony Hospital, Glasgow.

MAUNDER.—On the 4th inst., Charles Frederick Maunder, F.R.C.S.E., late of Queen Anne-street, aged 47.

SISSON.—On the 29th ult., Richard Samuel Sisson, Esq., M.D., late of 37, Warwick-road, Maida-hill, W., in his 60th year.

SMALL.—On the 2nd inst., at 7, Yorke-crescent, The Common, Woolwich, Deputy Surgeon-General J. Small, P.M.O., aged 55.

WALKER.—On the 25th ult., at King's Lynn, Henry Walker, M.R.C.S.E., Surgeon-Major, Army Medical Department, aged 47.

WILLIAMS.—On the 27th ult., at Castagnolo, near Florence, on his way from Burmah, Dr. Clement Williams, formerly Assistant-Surgeon to the 68th Light Infantry, and first Political Agent at Mandalay to the Chief Commissioner of British Burmah, aged 45.

N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*

# Notes, Short Comments, and Answers to Correspondents.

### "PERSONAL FAITH."

THE Rev. T. S. Coles, preaching at Chobham Church on the 22nd ultimo, referred to the confession of faith left by the late Dr. Tilbury Fox. The reverend gentleman selected his text from Romans, chap. i., verse 16, and took occasion to compare this declaration of the Apostle with one exactly similar again made by him at the latest period of his life in 2nd Timothy, chap. i., verse 12. The preacher continued that this clear confession had been the heartfelt experience of multitudes to the present hour; and, as an example, he read from the pages of THE LANCET a full obituary notice which had been prepared by the late eminent Dr. Fox for that journal in view of his own decease. He went on to observe that this noble utterance of faith was an affecting tribute to the Gospel as a power real, practical, and abiding; real, because dealing not with abstractions, but with personages, and especially with a living and loving Saviour; practical, because bringing into appropriate exercise every faculty of the mind; abiding, because strongest when flesh and heart are failing. He exhorted his hearers never to be "ashamed" of such a Gospel, bearing the testimony of every true believer to its unfailing source of consolation and hope.

*Mr. George Billing.*—The Medical Benevolent College is the only institution we can think of. We advise our correspondent to write to the Secretary.

*P. B.*, (Limerick.)—Grosvenor-street, London. Write and inquire.

### SUICIDE.

THE *Revue Britannique* has been subjecting to analysis the statistics of several States of Europe relating to suicide for two periods, 1855-60 and 1870-74. From this analysis several curious and interesting results are obtained, not the least of which is that the still lingering popular belief in many parts of the continent that England is the "classic land of suicide" can scarcely be maintained longer, and must become incongruous even in the pages of a psychological novel. During the first period (1855-60) Denmark had the greatest number of suicides, Northern Germany stood second in rank, and France had a much lower place in the scale. During the second period (1870-74) Denmark occupied the first place, and France the second. The proportion of suicides during this period in these and other countries in every million of population was as follows:—Denmark, 211·23; France, 152·21; Switzerland, 142·76; Prussia, 127·35; Austria, 109·14. England had the lowest proportion—namely, 66·36. The analyst takes occasion to point out that suicide has in recent years undergone a considerable increase in Germany, and that this increase has especially been manifested since the declaration of German Unity and formation of the Empire. From a general review of the statistics considered, it would appear that suicide is at least three times more common among men than women. Curious preferences as to methods of suicide are observed in different countries, and not less curious differences in the selection of the different methods by males and females.

*Dr. T. Bacon.*—The case will be published in an early number.

### PROVIDENT AS AGAINST FREE DISPENSARIES.

*To the Editor of* THE LANCET.

SIR,—In his letter on the above subject, Dr. Hooper raises an important question. Speaking of free dispensaries, he says they "offer no temptation to the prescriber to make quassia do duty for quinine, opium for morphia," and so on. One has only to look down the drug bill of almost any one of our charities to see that the total amount is made up principally by some three or four items—quinine, sweet spirits of nitre, aromatic spirits of ammonia, iodide of potassium, and spirits of wine,—and the price charged for these is equal to that of all the other drugs put together. Now I am sure it would be a boon to our hospitals and dispensaries if we could find cheap substitutes for these expensive drugs. Take quinine. Is quassia not a good substitute? I unhesitatingly answer, Yes. Ever since reading Professor Wood's "Treatise on Therapeutics" five years ago, I have almost always used quassia, and I agree with the professor that, in the great majority of cases where quinine is used, quassia answers equally well. The exception is where a nerve tonic is needed, and in phosphorus and nux vomica we possess better and cheaper remedies than quinine. In the case of aromatic spirit of ammonia, an aqueous solution of the carbonate, though not quite so agreeable, answers equally well; and so with nitric ether, the simple nitrate of potash where a diuretic or sedative action alone is required, and to which is superadded some simple diaphoretic, as acetate of ammonia, where that action is desired. There is, of course, no substitute for iodide of potassium. Spirits of wine used to cost our dispensary £50 a year, used principally as spirits of chloroform. Now that the aqueous solution of chloroform is used, a large sum is saved; and as it is the chloroform one wants, not the spirit—for no one will contend that ten drops of spirit can have much power,—I do not see that any harm is done to the prescription. So I might go on multiplying examples; but I have said enough to show that by a little management great saving to our charities can be accomplished without injury to our patients. Cordials are very well for paying patients, but they can easily be dispensed with in hospital cases.

One word on *provident* as against *free* dispensaries. I was formerly a stronger advocate of provident dispensaries than I am now. The "provident principle" is equally good now as then; but, as it is too often put into practice, it is nothing more than *cheap physic*. The large class for which the provident dispensary is designed—the class between the pauper and the small tradesman—only join it in small numbers; the rest wait till they become ill; then for a nominal fine and a few pence they are attended during their illness. When they are well they cease to pay. That does not teach them providence, and thus far they are not benefited. On the other hand, the small tradesman and respectable mechanic, who can afford to pay a small medical bill, are supporters of the dispensary. Here the doctor is injured, if not the patient likewise. I say nothing of the hundred and one so-called "provident dispensaries" where for twopence, sixpence, or one shilling the patient can at any time get attended at his own home by the skilled proprietor of the institution, and medicine, of course, included! These are scandals to our profession, and the Medical Council would not be altogether wasting its time were it to attempt to deal with this matter.

I am, Sir, yours truly,

JNO. DEWAR, L.R.C.P.I.,
Physician-Accoucheur to the Chelsea, Brompton, and Belgrave Dispensary.

Sloane-street, S.W., June 17th, 1879.

### FRIENDLY SOCIETIES' MEDICAL INSTITUTIONS.

MR. C. G. LEACOCK's letter in the *Grantham Journal* is very good, and worthy of the attention of all clubs and those who administer them.

*M.*, (Chertsey.)—We will investigate the matter.

### TYPHOID AND RIVER POLLUTION.

A CORRESPONDENT writes to the *Bristol Mercury*, exposing facts of a serious nature. He states that while fishing with a friend near the weir at Kelston he noticed the carcases of several pigs floating down the water, and was informed by a resident that they were the pigs that had died from typhoid fever. The informant had seen more than sixty carcases floating down the river during the last three weeks. This matter should be at once investigated. The rapidity with which typhoid is conveyed by water is so well known that there can be no doubt as to the danger such a practice as that described would create; and if the above assertions are correct, the local sanitary authorities have an urgent duty to perform, and a heavy responsibility resting on them.

*Mr. J. Henry Ashworth.*—Our correspondent must abide by his contract, unless he can induce the other parties to it to release him.

## "SURGEON-DENTISTS."

*To the Editor of* THE LANCET.

SIR,—The best thanks of the whole medical profession are due to you for the excellent article which appeared in your last issue relative to the present abuse of the title "surgeon-dentist." I say the whole profession, because the interests of every physician and surgeon who does now, or may yet, devote himself to the practice of any specialty are as deeply involved as those of the qualified surgeon practising dental surgery.

The Government Bill for the Amendment of the Medical Acts states distinctly, in the clause referring to titles, "that no person shall take or use the title physician, surgeon, apothecary, or doctor unless he is registered under the Medical Act of 1858." Nevertheless, this provision may be, and is, evaded in the case of persons not possessed of any medical or surgical qualification whatever by the simple use of any adjunct that may occur to them, as physician-accoucheur, surgeon-accoucheur, surgeon-oculist, aurist, or dentist, as the case may be. It is earnestly to be hoped that this evident defeat of the intention of the clause will be duly pointed out to the Select Committee of the House now engaged upon the subject of medical reform, and their attention at the same time called to the simplicity of the remedy already suggested—viz., the addition of a very few words to the sentence in question as it already stands, so that it should run thus: "That no person should take or use the title physician, &c., either alone or in conjunction with any other word or words, unless he is registered under the Medical Act of 1858." I had myself hoped to have given evidence before them upon the subject; but as unforeseen circumstances have within the last fortnight rendered this impossible, I embrace this opportunity of commending it to the notice of the many, who are fully as interested in the subject as myself, and of expressing my confident hope that the cause will on this occasion find an abler advocate than,

Yours very faithfully,

West Cowes, July 9th, 1879. W. DONALD NAPIER.

### ANOTHER HANDBILL.

A HANDBILL has been forwarded to us, delivered by hand on Westminster-bridge, in which some person, styling himself a physician, surgeon, &c., offers *advice and medicine* for sixpence!

*W. T.*—The examiners for the Indian Medical Service are the same as for the Army and Navy. At the last examination they were Dr. Aitken, Dr. Allman, Mr. Busk, and Mr. Pollock.

*Gamma.*—Certainly not.

*Dr. W. R. Thomas.*—As early as possible.

## THE TREATMENT OF SEA-SICKNESS.

*To the Editor of* THE LANCET.

SIR,—Under the above heading in your columns I have noticed that the use of nitrite of amyl as an antidote for sea-sickness is spoken of in very assuring terms. As adverse experience is as essential in testing the value of a drug as corroborative evidence, I trust you will kindly allow me to make a few remarks on the subject.

Whilst acting as surgeon in charge of a steamship to Calcutta and back, I had a fair opportunity of testing the efficacy of this drug. In only one case had it any marked beneficial result, and in several cases, my own included, I found the headache rather increased. Equally useless was the hypodermic injection of morphia over the stomach; but I did not give this method a very extensive trial. What seemed to me to give the most relief was a dose of Eno's fruit-salt or a seidlitz powder every morning on awaking, which I attribute to the probability of their influencing the secretions of the liver. I am of opinion that sedatives, although affording some relief at the time, prove afterwards to do more harm than good.

I am, Sir, your obedient servant,

July, 1879. G. SHERMAN-BIGG, M.R.C.S., &c.

*To the Editor of* THE LANCET.

SIR,—In your last number I note the suggestion that nitro-glycerine should have a trial in the treatment of sea-sickness, on the ground that it is similar in chemical constitution to nitrite of amyl. If the gentlemen who make this proposal will drop one minim of nitro-glycerine upon a handkerchief, and inhale it for a half a minute, they will experience in the course of two minutes such a headache as will be a "caution" to them.

Yours &c.,

July, 1879. FIAT EXPERIMENTUM, &c.

### CELLAR DWELLINGS IN LIVERPOOL.

THE Health Committee of Liverpool has of late been exposed to more or less virulent attacks for their inactivity in respect to cellar dwellings. The Chairman of this body has at last, however, deigned to answer these accusations, and figures given certainly testify to fair amount of useful work accomplished. It appears that during the two years, dating from the 1st of July, 1877, to the 30th of last month, 664 cellars have been absolutely filled up, so as to put an end to all possibility of their being used as habitations; while 1864 cases of illegal occupation have also been dealt with during this period of time.

## "DISEASES OF THE NERVOUS SYSTEM."

*To the Editor of* THE LANCET.

SIR,—Reviewers are proverbially omniscient, and always more intimately acquainted with subjects than the authors of books they criticise. Having this axiom duly impressed upon my mind, I was surprised to find that the writer of the lively notice of my book on Diseases of the Nervous System in last week's LANCET should have questioned my statement that apoplexy of the retina may occur from uterine derangements. My statement to this effect is called "precise, but inaccurate." My surprise increased when I found that the reviewer had actually condescended to consult authorities on this point, but had failed to discover any grounds for my assertion. In his selection of authorities he must have been peculiarly unfortunate; for on taking down from my shelves the very first work on Ophthalmology which came to hand—viz., Mr. Soelberg Wells's "Treatise on Diseases of the Eye," I find therein the following passage:—"Retinitis apoplectica occurs frequently together with disturbances of the general circulation, which may be due to affections of the uterus....thus it is not unfrequently seen together with suppression of the menses" (p. 349).

This seems to me as plain as possible. It would be easy to point to other references; but it will be seen from the one I have given that if your reviewer has charged me with inaccuracy, I have a far better right to charge him with ignorance.

I leave his other strictures to the appreciation of readers of my volume; and requesting your insertion of the above,

I have the honour to remain, your obedient servant,

Bryanston-street, W., July 6th, 1879. JULIUS ALTHAUS, M.D.

*** In a review of Dr. Althaus's work on the Prevalence and Pathology of Nervous Diseases (THE LANCET, July 5th), we took exception, as "precise and inaccurate," to the statement that apoplexy of the retina is due to (amongst other causes) "impeded general circulation from disease of the womb." In support of this statement, Dr. Althaus has forwarded to us a quotation from Mr. Soelberg Wells's "Treatise on Diseases of the Eye," stating that "Retinitis apoplectica occurs frequently together with disturbances of the general circulation, which may be due to affections of the uterus....thus it is not unfrequently seen together with suppression of the menses." The difference between the statements of Mr. Soelberg Wells and Dr. Althaus illustrates precisely the point to which we took exception. Had Dr. Althaus contented himself with similar cautious terms, his statement would have been free from objection; but in asserting that disease of the womb *impedes* the general circulation, and in classing it, as an impediment to the general circulation, with disease of the heart, liver, and kidneys, he states the facts in a form which cannot be regarded as accurate.—ED. L.

*F. M.*—Registration is necessary; but we are not aware that surgical qualifications are indispensable.

*Verb. Sap.* will find the subject referred to in an annotation. We quite agree with our correspondent.

## YELLOW FEVER AT ST. THOMAS, W.I.

*To the Editor of* THE LANCET.

SIR,—I am much astonished to learn from THE LANCET of May 3rd that you have entirely misunderstood my letter of April 14th. The truthfulness of the telegram in question I have always denied, and always shall deny.

Enclosing a copy of my letter of April 14th, I beg to repeat my request to you to publish this letter in your next issue.

I remain, Sir, yours respectfully,

CHR. BRÖNDSTED, King's Physician.

St. Thomas, W.I., June 17th, 1879.

[COPY.]

*To the Editor of* THE LANCET.

SIR,—It has come to my knowledge that Consul Geo. A. Stevens had nothing whatever to do with the telegram reporting "a severe outbreak of yellow fever in St. Thomas," and to which I referred in the letter you were good enough to publish for me in THE LANCET of February 8th—i. e., No. 6. In so far, therefore, as my letter conveys the erroneous impression (which at the time I wrote was my own) that Consul Stevens might be the author of the telegram, I would now beg you to favour me by publishing this rectification in your next issue.

I remain, Sir, yours respectfully,

CHR. BRÖNDSTED, King's Physician.

St. Thomas, W.I., April 14th, 1879.

### THE RED CROSS IN MOSCOW.

DURING the recent Russo-Turkish war the municipality of Moscow established, under the Red Cross, 1000 beds for the sick and wounded of the army. From a return lately published it appears that these beds were distributed in eight hospitals, and that they received 2259 patients in 1877. The institution of the hospitals cost the city 85,238 roubles, the maintenance 91,378 roubles, making altogether 176,616 roubles. In addition to the above eight hospitals, with a total of 1000 beds, there were established in Moscow for the use of the sick and wounded from the seat of war 19 ambulances, with 464 beds.

*A Country Practitioner.*—There is no obligation in the absence of a contract.

### UNUSUALLY EARLY MENSTRUATION.

*To the Editor of* THE LANCET.

SIR,—The following case may be of interest to your readers, although it is by no means the earliest age on record.

Mrs. B——, mother of seven children, consulted me about her little girl, aged two years and seven months, who was "bleeding from the privates," and had suffered from the same complaint for the last five months at intervals of three to four weeks, the discharge generally lasting from four to five days, during which time she was very irritable, had slight diarrhœa, no appetite, and cried whenever the lower part of her back was handled. The mother at first took no notice of it, as her other daughter, when seven years old, suffered in a similar manner for a year on and off, but had no return of it till nearly fourteen, when it was very scanty and irregular. I prescribed the compound syrup of the phosphate of iron, which had the desired effect of checking the "period."

There are several cases on record of "early menstruation," but I am not aware of any in which it has occurred to two children (the only girls) in the same family, which is therefore my excuse for bringing the case before your notice. I remain, Sir, yours truly,

Westgate-on-Sea, June, 1879. G. CLARENCE HARDING.

*Dr. Campbell.*—The two senior Fellows of the College of Surgeons are Mr. J. M. Arnott and Mr. J. F. South: the former was admitted a Member of the College so long ago as April, 1817, and a Fellow in December, 1843; the latter was admitted a Member in August, 1819, and a Fellow in December, 1843. Presuming each to have been twenty-two years of age, then required, the former will have reached his eighty-fourth year, and the latter his eighty-second year. The former gentleman is still in robust health; the latter is rather feeble.

*Sperans.*—It is impossible.

### VOMITING IN PREGNANCY TREATED WITH INGLUVIN.

*To the Editor of* THE LANCET.

SIR,—I was consulted by Mrs. W——, aged thirty, who stated she had been suffering from constant and excessive sickness for eight weeks. The following is her history:—This was her second pregnancy. With the first she suffered quite as much as with this one. She had consulted several physicians, but without receiving the least benefit. At the end of the third month she miscarried, and was not sick after. I commenced to treat her with bismuth, pepsin, and cerium combined, first in small doses frequently repeated, afterwards in larger doses at longer intervals; hygienic measures were at the same time had recourse to, but without the slightest effect. I was then induced to try ingluvin. I commenced giving ten-grain doses every two hours; this diminished to a great extent the violence and the number of the attacks of vomiting. I then increased the dose to fifteen grains every three hours. At the end of a week she perfectly recovered, and has not had a return of the sickness.

I should be glad to know if other medical men who have tried this remedy have met with the same result.—Yours &c.,

CHARLES P. KEMPE, M.D.

Ladbroke-grove-road, Notting-hill, June 21st, 1879.

### CERTIFYING FACTORY SURGEONS.

*To the Editor of* THE LANCET.

SIR,—I shall be glad to learn through your columns the opinions of my brother certifying factory surgeons on the working of the new Act. The fee for an examination is reduced to the munificent sum of *sixpence*, for which we have to make a personal examination, fill in a certificate in a register, and if the person to be examined does not produce a certificate of birth, to transmit a certificate that he has not produced his certificate of birth to the sub-inspector of the district. My humble opinion is that "le jeu ne vaut pas la chandelle," and I am quite prepared to resign my lucrative (?) appointment if I find that the feeling is unanimous amongst the profession. Yours &c.,

June 25th, 1879. C. F. S.

### PAPER-COLLARS.

*To the Editor of* THE LANCET.

SIR,—Until the appearance in THE LANCET of the correspondence on the subject, I was under the impression that the presence of arsenic in paper-collars was pretty generally known, as I became aware of it about nine years ago. Possibly, however, it may be present in some and not in others. I have worn these articles *exclusively* for the last ten years, and have never experienced any injurious effects therefrom.

Yours obediently,

Clifton, July 7th, 1879. G. S. THOMSON, M.D

### THE M.D. OF PHILADELPHIA.

*Mr. Michael Whitmarsh, M.R.C.S. Lond.*, has very kindly sent us particulars of a personal search he has instituted into the source of Philadelphian degrees. The conclusion he has come to is that they emanate from a person who he thinks has no kind of right to issue such degrees. Mr. Whitmarsh undertook the inquiry in the interest of a friend who had spent £20 over this worthless document, being in the town about six weeks since. He advises all persons possessing the document to put it in the fire. This is a duty they owe to themselves, and one which we have previously impressed upon the holders.

### "ON A HITHERTO UNNOTED FEATURE OF THE BLOOD IN LEUCOCYTHÆMIA."

*To the Editor of* THE LANCET.

SIR,—On reading Mr. Bousfield's communication on the above subject, it struck me that I had seen similar appearances described elsewhere. Accordingly I referred to Quain's Anatomy, and on page 23, vol. ii., I found the following statement: "Granular masses occasionally occur in drawn blood, even when taken from a healthy person, but more especially in a cachectic state of the system, which on minute examination are seen to be composed of excessively fine, colourless, discoid particles. The latter, under favourable circumstances, develop into vibrating filaments, which break away from the mass, and move freely in the liquid." Surely these are the same masses which Mr. Bousfield saw. They were discovered as far back as 1873 by Osler.—I am, Sir, yours &c.,

July 7th, 1879. C. PARDEY LUKIS.

*Mr. A. H. Thompson.*—Our correspondent will find the information he desires in the "Regulations for the Army Hospital Corps," published by Harrison and Sons. By the Warrant of 1st March, 1873, "all appointments of officers will be made by selection from the non-commissioned officers of the corps."

*Mr. A. R. Anderson.*—Shall appear shortly.

### MEDICAL NOMENCLATURE.

*To the Editor of* THE LANCET.

SIR,—Whilst in New York last month, I read in a paper there particulars of a recent Medical Congress at Berlin, where one Dr. Winckel described a new disease that had lately broken out with great fatality at Dresden. The symptoms were difficult respiration, froth on the lips, and an extraordinary change in the blood, which becomes dark-brown and of a syrup-like consistence, only flowing from the wound under strong pressure. Convulsions soon set in, and the child (for it appears to be an entirely child's disease) dies in about thirty-two hours from the commencement of attack. What, however, was the point I thought would most interest your readers is the name proposed there to be given to it: "Cyanosis afebrilis icterica perniciosa cum hæmoglobinuria." Now, after that, can anyone say "there is nothing in a name"? I may add that the President of the Congress suggested the shorter and more sensible title of "Winckel's disease."—Yours &c.,

June 28th, 1879. W. A. SATCHELL, F.R.C.P. Ed.

### RUBBER BANDAGES.

*To the Editor of* THE LANCET.

SIR,—Dr. Martin states in his paper, which appeared in your issue of June 14th, that the solid rubber bandages supplied by English firms are comparatively useless if compared with those of American manufacture. My own experience, which is now pretty considerable, does not in any way confirm this statement. In over thirty cases of chronic affections of the leg, ulcers, and eczema, I have met with uniformly good results, the bandages used being supplied by more than one English firm. As this method of treatment is most successful, I cannot but think it undesirable that surgeons should be led to believe that a suitable bandage can be obtained only from one firm, when many chemists and instrument makers are able to supply an article equally useful at considerably less cost. Your obedient servant,

Leeds, June 17th, 1879. A. F. M'GILL.

### A PUBLIC NUISANCE.

*To the Editor of* THE LANCET.

SIR,—For some weeks past an Italian organ-grinder has been parading the streets, exciting much disgust, for on his nose and upper lip are two most horrible and unsightly excrescences. What would be the effect of such a spectacle on a pregnant woman? and is there not some legal remedy for such an abominable exhibition?—Yours obediently,

ALFRED EDWARD WOODS.

Mount-street, Grosvenor-square, July 5th, 1879.

### STETHOSCOPES.

*To the Editor of* THE LANCET.

SIR,—In a letter just received by me from Mr. Edison, of Menlo Park, New Jersey, U.S., he says: "I am at present experimenting on a stethoscope with every prospect of success; but the instrument will be very expensive, and for this reason cannot come into general use. The microphone, so called, cannot be used for this purpose, as it translates extraneous sounds, and is no way reliable."

Yours obediently,

J. J. WEDGWOOD, M.D

George-street, Hanover-square, June 24th, 1879